MJC Programs

How to read program information

Programs and awards are listed in alphabetical order from A-Z. The awards listed under each program are listed by the type of award in this order: AST, AAT, AS, AA, CERT, SR.

Agricultural Business PROGRAM

This program will develop and expand the student's knowledge of Agriculture Business. The student will develop knowledge and skills sufficient to gain and hold entry-level jobs in Ag Business. Contact the division office in the Agriculture Building for advising assistance.

Title of the Educational Program

Type of Award (degree, certificate, or skills recognition)

Name of the award as it will appear on award and transcript

A.S. DEGREE: AGRICULTURE BUSINESS

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.*
2. *Organize and prepare reports, presentations, and other information pertaining to managerial procedures.*
3. *Describe the economic significance of California Agriculture and its relationship to the global economy.*
4. *Explain supply and demand as it relates to local and regional agriculture business industries.*
5. *Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.*
6. *Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.*
7. *Recognize world markets and describe their effect on local agriculture economies.*

MAJOR REQUIREMENTS

To earn an associate in science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 100) or the University Preparation Pathway (p. 97) which includes completion of the requirements below.

Courses required for the award

The preferred sequence of courses within a 4 semester program. NP means "no preference".

Elective courses (students can be given options\ between or among courses in the electives)

Total number of units required for that major. Note: Does not include total units for associate degree.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 [1] Introduction to Agricultural Education and Careers 1
AG 349A-D [NP] Work Experience ** (for a total of 4 units) ..... 4 OR
AG 249 [NP] Agriculture Internship** 2

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200 [1,2] Introduction to Plant Science 3
ANSC 200 [1,2] Introduction to Animal Science 3
NR 200 [1,2] Soils 4
AGM 200 [NP] Introduction to Mechanical Technology 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

AGEC 200 [2] Agriculture Accounting and Analysis 3
AGEC 210 [NP] Elements of Agricultural Economics 3
AGEC 220 [3, 4] Agricultural Business Management 3
AGEC 225 [NP] Agriculture Computer Applications 3

IV. ELECTIVE COURSES - COMPLETE 4 UNITS

Any 200 series Agriculture course with a laboratory.
No more than 1 unit in a 300 level Agriculture class.

TOTAL UNITS IN A.S. MAJOR 30

***Required*

A.S. DEGREE: AGRICULTURE: SALES, SERVICE

The student will learn step-by-step sales techniques, stage presence, self-evaluation of voice, habits, abilities in sales, and understanding of sales career. This program will help students make decisions as to whether or not they are qualified in sales, and prepare them for a sales career if they choose that vocation. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate proficiency in accounting procedures using a double-entry bookkeeping system.*
2. *Organize and prepare reports, presentations, and other information pertaining to managerial procedures.*
3. *Describe the economic significance of California Agriculture and its relationship to the global economy.*
4. *Explain supply and demand as it relates to local and regional agriculture business industries.*
5. *Demonstrate the ability to make logical business decisions based on the analysis of business trends locally, regionally, and globally.*
6. *Demonstrate proficiency using computers, the Internet, and other technology as they relate to agri-business.*
7. *Recognize world markets and describe their effect on local agriculture economies.*

MAJOR REQUIREMENTS

To earn an associate in science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 100) or the University Preparation Pathway (p. 97) which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 [1] Introduction to Agricultural Education and Careers 1
AG 349A-D [NP] Work Experience (for a total of 4 units)** ..... 4 OR
AG 249* [NP] Agriculture Internship** 2
** Work experience/internship must be in marketing sales or closely related.*

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

AGM 200 [NP] Introduction to Mechanical Technology 3
ANSC 200 [NP] Introduction to Animal Science 3
NR 200 [NP] Soils 4
PLSC 200 [NP] Introduction to Plant Science 3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

AGEC 200 [2-4] Agriculture Accounting & Analysis 3
AGEC 210 [NP] Elements of Agricultural Economics 3
AGEC 215 [NP] Agricultural Marketing 3
AGEC 280 [1,2] Agricultural Sales and Service 3

IV. ELECTIVE COURSES - COMPLETE 4 UNITS

AG 280 [NP] Agricultural Computations 3
AG 285 [NP] Agricultural Communications 3
AGEC 220 [2,4] Agricultural Business Management 3
AGEC 225 [1] Agriculture Computer Applications 3
COMM 100 [NP] Fundamentals of Public Speaking ..... 3 OR
COMM 102 [NP] Introduction to Human Communication 3
ANY COURSE NOT TAKEN IN CORE MAJOR OR OPTIONS.

TOTAL UNITS IN A.S. MAJOR 30

***Required*

Accounting
PROGRAM
(209) 575-6129

The Accounting Program is an intensive study of accounting theory as it applies to contemporary business environment. Accounting is a vital element of business success. Accountants record business operations and, after analyzing company performance, make recommendations to increase efficiencies and overall company success. Beginning courses concentrate on recording, classifying, and reporting financial information resulting from business transactions. The student then learns the financial structure of business and analysis of financial information for management decision making. Double entry accounting, ledger and journal techniques and accounting cycles are emphasized. The use of computers in accounting is also an integral part of the program. Courses are offered during day and evening hours with some classes taught in a hybrid or fully online format to accommodate student schedules. Degrees and Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All Required Courses must be passed with a "C" grade or better. Interested students should consult Business Administration faculty advisors.

A.S. DEGREE: **ACCOUNTING**

PROGRAM REQUIREMENTS

The A.S. in Accounting Degree is designed for students entering into the accounting field at the entry level. If you wish to pursue professional certification (i.e., Certified Public Accountant and/or Certified Management Accountant), you should plan to earn at least a bachelor's degree in Business Administration with a major in Accounting. To earn an Associate in Science degree, the student must complete the MJC Associate Degree Requirements in addition to the following coursework.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment in an entry-level position in the accounting field.*
3. *Demonstrate the working knowledge required to perform the various tasks necessary in a complete accounting cycle through financial statements.*

REQUIRED COURSES - COMPLETE 19 UNITS

BUSAD 201	[2, 3]	Financial Accounting	4
BUSAD 202	[3, 4]	Managerial Accounting	4
BUSAD 200	[2, 3, 4]	Spreadsheet Skills for Financial Accounting	2
BUSAD 203	[3, 4]	Computer Accounting	3
BUSAD 319	[3, 4]	Payroll Accounting	3
BUSAD 336	[2, 3]	Tax Accounting	3

ELECTIVE COURSES - COMPLETE A MINIMUM OF 6 UNITS

BUSAD 218	[2]	Business Law	4
BUSAD 274	[2]	Human Resources Management	3 OR
BUSAD 377	[2]	Human Relations in Business	3
BUSAD 248	[1]	Introduction to Business	3 OR
BUSAD 240	[1]	Principles of Management	3
BUSAD 230	[1]	Personal Finance	3
BUSAD 300	[1]	Machine Calculation	2
BUSAD 50	[1]	Business Computations	3
BUSAD 310	[1]	Bookkeeping 1	3
CSCI 201	[1]	General Computer Literacy	3 OR
OFADM 256	[1]	Introduction to Word Processing	1 AND
OFADM 259	[1]	Introduction to Spreadsheet Software	1 AND
OFADM 261	[1]	Introduction to Databases	1

TOTAL UNITS IN A.S. MAJOR 25

CERTIFICATE OF ACHIEVEMENT: **ACCOUNTING**

The Accounting Certificate is designed for students entering into the accounting field at the entry level. If you wish to pursue professional certification (i.e., Certified Public Accountant and/ or Certified Management Accountant), you should plan to earn at least a bachelor's degree in Business Administration with a major in Accounting.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment in an entry-level position in the accounting field.*
3. *Demonstrate the working knowledge required to perform the various tasks necessary in a complete accounting cycle.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 24 UNITS

BUSAD 201	[1]	Financial Accounting	4
BUSAD 202	[2]	Managerial Accounting	4
BUSAD 200	[1]	Spreadsheet Skills for Financial Accounting	2
BUSAD 203	[2]	Computer Accounting	3
BUSAD 50	[1]	Business Computations	3
BUSAD 300	[1]	Machine Calculation	2
BUSAD 319	[2, 3]	Payroll Accounting	3
BUSAD 336	[2, 3]	Tax Accounting	3

ELECTIVE COURSES - COMPLETE 3-4 UNITS

BUSAD 218	[1]	Business Law	4
BUSAD 230	[1]	Personal Finance	3
BUSAD 274	[1]	Human Resources Management	3 OR
BUSAD 377	[1]	Human Relations in Business	3
BUSAD 248	[1]	Introduction to Business	3 OR
BUSAD 240	[1]	Principles of Management	3
BUSAD 310	[1]	Bookkeeping 1	3
CSCI 201	[1]	General Computer Literacy	3 OR
OFADM 256	[1]	Introduction to Word Processing	1 AND
OFADM 259	[1]	Introduction to Spreadsheet Software	1 AND
OFADM 261	[1]	Introduction to Databases	1

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD ..... 27 - 28

CERTIFICATE OF ACHIEVEMENT: **ACCOUNTING CLERK**

The Accounting Clerk Certificate is designed for students planning to enter the job market in an entry level accounting clerk/front office position. Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All Required Courses must be passed with a "C" grade or better. Interested students should consult Business Administration or Office Administration faculty advisors.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Utilize technology to perform general office procedures.*
2. *Obtain entry level employment as an accounting clerk.*
3. *Demonstrate the working knowledge required to perform the various tasks necessary in a complete accounting cycle.*

REQUIRED COURSES - COMPLETE 15.5-18.5 UNITS

OFADM 301	[1]	Beginning Keyboarding	1.5 OR
OFADM 303	[1]	Keyboarding for Speed and Accuracy	0.5
OFADM 256	[1]	Introduction to Word Processing	1
OFADM 259	[2]	Introduction to Spreadsheet Software	1 OR
BUSAD 200	[2]	Spreadsheet Skills for Financial Accounting	2
OFADM 314	[2]	Office Procedures & Technologies	3
BUSAD 310	[1]	Bookkeeping 1	3
BUSAD 203	[2]	Computer Accounting	3
BUSAD 300	[1]	Machine Calculation	2 OR
OFADM 375	[1]	10-Key on the Computer	1
BUSAD 50	[1]	Business Computations	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD .....15.5 - 18.5

Administration of Justice PROGRAM
(209) 575-6129

Modesto Junior College offers a comprehensive Administration of Justice Program. The curriculum addresses basic knowledge and skills required in the criminal justice area. The two-year college program is designed to prepare candidates for employment or transfer to a four-year educational institution offering a major in various criminal justice fields. Satisfactory completion of the requirements will lead to the Associate in Science Degree or Associate of Science for Transfer Degree. Classes are offered both day and evening and in an online format. The college cooperates with the Administration of Justice Advisory Committee. All courses are open to individuals who have been admitted to the college and who meet the prerequisites, unless specifically exempted by statute. Courses which involve the handling of firearms are not open to individuals who have been convicted of a felony or who are mental patients. (Penal Code Sections 29800 – 29825 and Welfare and Institutions Code 8100). Prior to use of a firearm in any course, each student must submit to a live scan check of their finger prints. All candidates for degrees in Administration of Justice should consult with an Administration of Justice advisor to select the courses most appropriate for meeting both the MJC Associate Degree Requirements and the current demands of employing agencies and transfer institutions.

A.S.-T DEGREE:
ADMINISTRATION OF JUSTICE

Modesto Junior College offers a comprehensive Administration of Justice Program. The curriculum addresses basic knowledge and skills required in the criminal justice area. The Associate of Science in Administration of Justice for Transfer Degree is designed to prepare candidates for transfer to a California State University offering a major in administration of justice/criminal justice. Course work is offered evidence, community relations corrections and law. Some potential careers are in the Administration of Justice field Correctional Officer, Local Police Officer, Local Deputy Sheriff, State Highway Patrol Officer, Investigator, Private Detective, Private Security Guard, Probation Officer, and Parole Officer. All courses are open to individuals who have been admitted to the college and who meet the prerequisites, unless specifically exempted by statute. Courses which involve the handling of firearms are not open to individuals who have been convicted of a felony or who are mental patients. (Penal Code Sections 29800 – 29825 and Welfare and Institutions Code 8100). Prior to use of a firearm in any course, each student must submit to a live scan check of their finger prints.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Explain the roles that the three components of the Administration of Justice System play in society and how these components interact with one another to provide public safety.*
2. *Define the role of policing and recognize importance of building and maintaining favorable community relations.*
3. *Interpret, assess and compare competing types of evidence and data.*
4. *Identify the legal and societal restrictions placed by society on the Administration of Justice System in carrying out its role or providing for the public safety of society.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN ADMINISTRATION OF JUSTICE FOR TRANSFER DEGREE:

1. *A minimum of 18 semester units in the major with a grade of C or better while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. All courses within the major must be completed with a C or better or "P" (Pass).*
2. *Completion of 60 semester CSU-transferable units using the CSU GE Breadth or the IGETC pattern.*
3. *Exactly 60 semester units are required for the degree.*

REQUIRED CORE - 6 UNITS

ADJU 201	[1]	Introduction to Administration of Justice	3
ADJU 203	[2]	Concepts of Criminal Law	3

LIST A: TWO COURSES - 6 UNITS

ADJU 202	[2]	Principles/Procedures of Justice System	3
ADJU 204	[NP]	Legal Aspects of Evidence	3
ADJU 212	[3]	Criminal Investigations	3
ADJU 235	[NP]	Introduction to Corrections	3
ADJU 232	[NP]	Juvenile Justice Procedures	3

LIST B: TWO COURSES - MINIMUM OF 6 UNITS

Any List A Courses Not Already Used			3
SOCIO 101	[NP]	Intro to Sociology	3
SOCIO 105	[NP]	Intro Statistics for the Social & Behavioral Sciences	3
PSYCH 101	[NP]	General Psychology	3
ADJU 205	[NP]	Community Relations	3
ADJU 210	[NP]	Communications in Criminal Justice	3
ADJU 213	[NP]	Patrol Procedures	3
ADJU 215	[NP]	Introduction to Firearms	3
ADJU 216	[NP]	Adv. Firearms and Range Application	3
ADJU 217	[NP]	Substance Abuse	3
ADJU 222	[NP]	Profiling Terrorism	3
ADJU 234	[NP]	Crime Causation	3
ADJU 243	[NP]	Domestic Violence Crisis Intervention	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 18

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6-9
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	11-12
TOTAL UNITS REQUIRED FOR A.S.-T DEGREE	**60**

**Note: Double counting courses in GE and the major is permissible.*
Guidance and Activities requirements are not required for the Associate in Science in Administration of Justice for Transfer degree.

A.S. DEGREE:
ADMINISTRATION OF JUSTICE

Modesto Junior College offers a comprehensive Administration of Justice Program. The curriculum addresses basic knowledge and skills required in the criminal justice area. The two-year college program is designed to prepare candidates for employment or transfer to a four-year educational institution offering a major in various criminal justice fields. Satisfactory completion of the requirements will lead to the Associate in Science degree. Classes are offered both day and evening. The college cooperates with the Administration of Justice Advisory Committee. All courses are open to individuals who have been admitted to the college and who meet the prerequisites, unless specifically exempted by statute. Courses which involve the handling of firearms are not open to individuals who have been convicted of a felony or who are mental patients. (Penal Code Sections 29800 – 29825 and Welfare and Institutions Code 8100). Prior to use of a firearm in any course, each student must submit to a live scan check of their finger prints. All candidates for degrees in Administration of Justice should consult with an Administration of Justice advisor to select the courses most appropriate for meeting both the MJC Associate Degree Requirements and the current demands of employing agencies and transfer institutions.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Assess the American legal system and how it applies to today's criminal justice profession.*
2. *To compose academic papers demonstrating critical thinking skills.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 18 UNITS

ADJU 201	[1]	Introduction to Administration of Justice	3
ADJU 202	[2]	Principles/Procedures of Justice System	3
ADJU 203	[3]	Concepts of Criminal Law	3
ADJU 204	[3]	Legal Aspects of Evidence	3
ADJU 205	[1]	Community Relations	3
ADJU 212	[4]	Criminal Investigation	3

ELECTIVE COURSES - COMPLETE 3 UNITS

ADJU 210	[4]	Communications in Criminal Justice	3
ADJU 213	[1]	Patrol Procedures	3
ADJU 215	[1]	Introduction to Firearms	3
ADJU 216	[NP]	Advanced Firearms and Range Application	3
ADJU 217	[2]	Substance Abuse	3
ADJU 222	[NP]	Profiling Terrorism	3
ADJU 232	[2]	Juvenile Justice Procedures	3
ADJU 234	[3]	Crime Causation	3
ADJU 235	[1]	Introduction to Corrections	3
ADJU 236	[2]	Correctional Law	3
ADJU 243	[NP]	Domestic Violence Crisis Intervention	3
ADJU 351	[NP]	Elements of Supervision in Public Safety	3

MINIMUM UNITS IN A.S. MAJOR 21

Agricultural Environmental Science
PROGRAM
(209) 575-6200

A.S. DEGREE:
AGRICULTURAL ENVIRONMENTAL SCIENCE (Formerly Forestry)

This program will develop job skills and knowledge in environmental science as it relates to agriculture. The student will demonstrate skills in sustainable resource management in agriculture to obtain employment or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Employ the scientific method to solve agricultural problems.*
2. *Perform environmental practices necessary to be successful in the agriculture industry.*
3. *Apply environmental principles to sustainable resource management problems.*
4. *Demonstrate the effective, safe work habits and inter-personal communication skills required by employers in the Agriculture industry.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. ENVIRONMENTAL CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[NP]	Introduction to Agricultural Education & Careers	1
AG 249 **	[NP]	Agriculture Internship	2
AG 259ABCD	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3
AGEC 210	[NP]	Elements of Agricultural Economics	3
AGEC 200	[NP]	Agricultural Accounting and Analysis	3

III. AGRICULTURAL ENVIRONMENTAL MAJOR COURSES - COMPLETE 15 UNITS

NR 222	[3]	Native Tree and Shrub Identification	3
ENSCI 108	[NP]	Environmental Conservation	3
ENSCI 110	[2]	California Water	3
AGGE 146	[1]	Agriculture, Environment and Society	3
PHILO 135	[NP]	Environmental Ethics	3

IV. MAJOR ELECTIVES - COMPLETE 2-3 UNITS

AGM 230	[NP]	Field Surveying	2
AG 285	[4]	Agricultural Communications	3
AGGE 150	[NP]	Sustainable Production Systems	3
EHS 201	[3]	Plant Identification & Usage 1	3

TOTAL UNITS IN AS MAJOR ..... 31 - 32

CERTIFICATE OF ACHIEVEMENT:
AGRICULTURAL ENVIRONMENTAL SCIENCE (Formerly Forestry)

This program will develop job skills and knowledge in environmental science as it relates to agriculture. The student will demonstrate skills in sustainable resource management in agriculture to obtain employment or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Practice safe work habits in an employment setting, including handling and storage of hazardous materials and operation of basic tools and equipment*
2. *Apply sustainable resource management skills for technical employment in the natural resource management.*
3. *Apply the principles of ecology, soil science, silviculture, cartography, and facilities maintenance and development to sustainable resources management problems.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[NP]	Introduction to Agricultural Education & Careers	1
AG 249 **	[NP]	Agriculture Internship	2
AG 259ABCD	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 6 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

ENSCI 108	[NP]	Environmental Conservation	3
NR 222	[3]	Native Tree and Shrub Identification	3
ENSCI 110	[2]	California Water	3
AGGE 150	[1]	Sustainable Production Systems	3

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 2-3 UNITS

AGM 230	[NP]	Field Surveying	2
AGM 215	[4]	Machinery Management	3
EHS 276	[NP]	Landscape Maintenance	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 22 - 23

Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

Agricultural Mechanics
PROGRAM *(MECHANIZED AGRICULTURE)*
(209) 575-6200

In this program, students will develop skills and knowledge to enter the mechanized agriculture field. Contact the division office in the Agriculture Building for advising assistance.

A.S. DEGREE:
IRRIGATION TECHNOLOGY

This program will provide students with the quickly evolving technical skills of the irrigation industry. Training and skill development include; the study of plant-soil-water relationships, water management and application, system design, evaluation and installation, pumping systems, and drainage. After successful completion of the program, graduates will be able to enter the workforce as irrigation managers, pump testers and repair technicians, system designers, system installers, ditch tenders and other utility personal. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Analyze plant/soil/water relationships and determine irrigation requirements for optimum plant growth and crop yield.*
2. *Design and install an appropriate irrigation system that provides the crop water requirements in an efficient and cost effective manner.*
3. *Evaluate an existing irrigation system and make recommendations to improve distribution uniformity and efficiency.*
4. *Evaluate irrigation pump performance and make recommendations to improve overall pumping plant efficiency.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include the completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115	[1]	Introduction to Agricultural Education & Careers	1
AG 249	[NP]	Agriculture Internship	2
AG 259ABCD	[NP]	Agricultural Work Experience	1 - 4

II AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

AGEC 225	[1]	Agriculture Computer Applications	3
PLSC 200	[1]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3

III MAJOR REQUIRED COURSES - COMPLETE 15 UNITS

AGM 235	[1]	Irrigation and Drainage	3
AGM 236	[2]	Advanced Irrigation and Drainage	3
AGM 237	[3]	Irrigation Wells, Pumps, and Drive Systems	3
AGM 238	[3]	Irrigation System Design	3
AGM 239	[4]	Irrigation System Installation and Maintenance	3

TOTAL UNITS IN A.S. MAJOR..... 29

A.S. DEGREE: MECHANIZED AGRICULTURE

In this program, students will develop skills and knowledge to enter the mechanized agriculture field. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Fabrication Option: Design and fabricate agriculture equipment effectively.*
2. *Fabrication Option: Select proper fabrication equipment for various construction and/or repair situations.*
3. *Power Option: Select proper tools and equipment for various applications, staying within the desired financial restraints.*
4. *Power Option: Repair basic power equipment effectively.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259ABCD **	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[NP]	Elements of Agricultural Economics	3 OR
AGEC 200	[NP]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS

AGM 200	[NP]	Introduction to Mechanical Technology	3 AND
AGM 210	[NP]	Agricultural Welding	3 AND
AGM 262	[NP]	Hydraulics/Pneumatics	3 OR
AGM 280	[NP]	Mobile Machinery Hydraulic Systems	3

FABRICATION OPTION

AGM 251	[NP]	Farm Construction and Materials	4

POWER OPTION

AGM 215	[NP]	Machinery Management	3 OR
AGM 240	[NP]	Truck and Tractor Power Trains	3

IV. AGRICULTURE ELECTIVE COURSES - COMPLETE 4-5 UNITS

AGM 211	[NP]	Advanced Agricultural Welding	3
AGM 214	[NP]	Equipment Service and Safety	1
AGM 241	[NP]	Diesel Engine Principles	3
AGM 289	[NP]	Principles of Power Mechanics/Small Engines	3

ANY 200 LEVEL AGRICULTURE COURSE INCLUDING THOSE THAT ARE LISTED, BUT NOT USED, IN AREA II ABOVE.

TOTAL UNITS IN A.S. MAJOR ..... 30 - 31

**Required*

***Internship/Work Experience must be Agriculture Related.*

Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 25A-B.

CERTIFICATE OF ACHIEVEMENT: ADVANCED HEAVY EQUIPMENT TECHNICIAN

In this program, students will develop additional skills and knowledge to enter the diesel mechanics field. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe the various employment opportunities available within the mechanized agriculture field and demonstrate the minimum educational requirements for entrance into each.*
2. *Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.*
3. *Select proper tools and equipment for various applications, staying within the desired financial restraints.*
4. *Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. MAJOR REQUIRED COURSES

AGM 215	[NP]	Machinery Management	3
AGM 221	[NP]	Equipment Diagnosis & Repair	3
AGM 240	[NP]	Truck and Tractor Power Trains	3
AGM 242	[NP]	Diesel Engine Overhaul	3
AGM 245	[NP]	Diesel Engine Fuel Systems & Diagnosis	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 15

CERTIFICATE OF ACHIEVEMENT: BASIC HEAVY EQUIPMENT TECHNICIAN

In this program, students will develop additional skills and knowledge to enter the diesel mechanics field. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.*
2. *Select proper tools and equipment for various applications, staying within the desired financial restraints.*
3. *Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better. Contact the division office in the Agriculture Building for advising assistance.

I. REQUIRED COURSES - COMPLETE 18 UNITS

AGM 210	[NP]	Agricultural Welding	3
AGM 216	[NP]	Agriculture Occupational Safety	3
AGM 241	[NP]	Diesel Engine Principles	3
AGM 243	[NP]	Heavy Machinery Electrical Systems	3
AGM 280	[NP]	Mobile Machinery Hydraulic Systems	3
AGM 289	[NP]	Principles of Power Mechanics/Small Engines	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 18

CERTIFICATE OF ACHIEVEMENT: HEAVY MACHINERY MANAGEMENT

In this program, students will develop skills and knowledge for the successful management of heavy equipment. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe the various employment opportunities available within the mechanized agriculture field and demonstrate the minimum educational requirements for entrance into each.*
2. *Locate, read, and interpret appropriate plans, manuals and equipment documentation in order to fabricate and/or repair equipment effectively.*
3. *Select proper tools and equipment for various applications, staying within the desired financial restraints.*
4. *Maintain tools and equipment and demonstrate the value of preventative maintenance and proper equipment usage.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. MAJOR REQUIRED COURSES- COMPLETE 16 UNITS

AGM 200	[NP]	Introduction to Mechanical Technology	3
AGM 214	[NP]	Equipment Service and Safety	1
AGM 215	[NP]	Machinery Management	3
AGEC 200	[NP]	Agriculture Accounting and Analysis	3
AGEC 220	[NP]	Introduction to Agribusiness Management	3
AGEC 225	[NP]	Agriculture Computer Applications	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 16

CERTIFICATE OF ACHIEVEMENT: IRRIGATION CONSTRUCTION AND INSTALLATION

This program will prepare students for jobs in the irrigation construction and installation industry. Training and skill development include; piping identification and installation, equipment operation, cost estimating, and plan interpretation. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Perform complete irrigation system installation from the pumping system to water discharge.*
2. *Develop accurate cost estimates for both irrigation components and labor costs.*
3. *Operate installation equipment such as tractors, backhoes, trenchers, graders and laser levels in a safe efficient manner.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 13 UNITS

AGM 210	[NP]	Agricultural Welding	3
AGM 235	[1]	Irrigation and Drainage	3
AGM 214	[NP]	Equipment Service and Safety	1
AGM 237	[3]	Irrigation Wells, Pumps, and Drive Systems	3
AGM 239	[4]	Irrigation System Installation and Maintenance	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....13

CERTIFICATE OF ACHIEVEMENT: **IRRIGATION DESIGN**

This program will prepare students for jobs in irrigation design. Training and skill development include; AutoCAD fundamentals, system hydraulics, site development and material selection. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Collect site data in regards to size, soil type, elevation differences, crop water needs, and water source in order to provide irrigation system recommendations.*
2. *Design a sprinkler irrigation system that is consistent with industry standards.*
3. *Accurately draw an irrigation system using AutoCAD software which is considered the industry standard.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 12 UNITS

AGM 235	[1]	Irrigation and Drainage	3
AGM 238	[3]	Irrigation System Design	3
AGEC 225	[1]	Agriculture Computer Applications	3
AGM 237	[3]	Irrigation Wells, Pumps, and Drive Systems	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 12

CERTIFICATE OF ACHIEVEMENT: **IRRIGATION MANAGEMENT**

This program will prepare students for jobs in the irrigation management industry. Training and skill development include; water management, plant-water-soil relationships, salinity management, system evaluation and improvements. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Analyze plant/soil/water relationships and determine irrigation requirements for optimum plant growth and crop yield.*
2. *Manage on farm irrigation systems in an efficient cost effective manner.*
3. *Develop irrigation schedules that optimize crop growth while conserving water.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 15 UNITS

AGM 235	[1]	Irrigation and Drainage	3
AGM 236	[2]	Advanced Irrigation and Drainage	3
PLSC 200	[NP]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3
AGEC 225	[1]	Agriculture Computer Applications	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 15

CERTIFICATE OF ACHIEVEMENT: **IRRIGATION TECHNOLOGY**

This program will provide students with the quickly evolving technical skills of the irrigation industry. Training and skill development include; the study of plant-soil-water relationships, water management and application, system design, evaluation and installation, pumping systems, and drainage. After successful completion of the program, graduates will be able to enter the workforce as irrigation managers, pump testers and repair technicians, system designers, system installers, ditch tenders and other utility personal. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Analyze plant/soil/water relationships and determine irrigation requirements for optimum plant growth and crop yield.*
2. *Design and install an appropriate irrigation system that provides the crop water requirements in an efficient and cost effective manner.*
3. *Evaluate an existing irrigation system and make recommendations to improve distribution uniformity and efficiency.*
4. *Evaluate irrigation pump performance and make recommendations to improve overall pumping plant efficiency.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115	[1]	Introduction to Agricultural Education & Careers	1
AG 249	[NP]	Agriculture Internship	2
AG 259ABCD	[NP]	Agricultural Work Experience	1 - 4

AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

AGEC 225	[1]	Agriculture Computer Applications	3
PLSC 200	[NP]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3

III. MAJOR REQUIRED COURSES - COMPLETE 15 UNITS

AGM 235	[1]	Irrigation and Drainage	3
AGM 236	[2]	Advanced Irrigation and Drainage	3
AGM 237	[3]	Irrigation Wells, Pumps, and Drive Systems	3
AGM 238	[3]	Irrigation System Design	3
AGM 239	[4]	Irrigation System Installation and Maintenance	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 29

CERTIFICATE OF ACHIEVEMENT: **MECHANIZED AGRICULTURE TECHNICIAN**

In this program, students will develop skills and knowledge to enter the mechanized agriculture field. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Fabrication Option: Design and fabricate agriculture equipment effectively.*
2. *Fabrication Option: Select proper fabrication equipment for various construction and/or repair situations.*
3. *Power Option: Select proper tools and equipment for various applications, staying within the desired financial restraints.*
4. *Power Option: Repair basic power equipment effectively.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2
AG 259ABCD**	[NP]	Agricultural Work Experience	1- 4

II. REQUIRED COURSES FOR CERTIFICATE - COMPLETE 15 UNITS

AGM 200	[NP]	Introduction to Mechanical Technology	3
AGM 210	[NP]	Agricultural Welding	3
AGM 215	[NP]	Machinery Management	3
AGM 241	[NP]	Diesel Engine Principles	3
AGM 262	[NP]	Hydraulics/Pneumatics	3

III. ELECTIVE COURSES FOR CERTIFICATE - COMPLETE 10 UNITS

AG 285	[NP]	Agricultural Communications	3
AGEC 280	[NP]	Agricultural Sales and Service	3
AGM 211	[NP]	Advanced Agricultural Welding	3
AGM 214	[NP]	Equipment Service and Safety	1
AGM 251	[NP]	Farm Construction and Materials	4
AGM 289	[NP]	Principles of Power Mechanics/Small Engines	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 30

**Required*

***Internship/Work Experience must be Agriculture related*

Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

Agriculture Business
PROGRAM
(209) 575-6200

This program will develop and expand the student's knowledge of Agriculture Business. The student will develop knowledge and skills sufficient to gain and hold entry-level jobs in Ag Business. Contact the division office in the Agriculture Building for advising assistance.

A.S.-T DEGREE:
AGRICULTURE BUSINESS

The Associate in Science in Agriculture Business for Transfer Degree (AS-T in Agriculture Business) will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Agriculture Business. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Potential careers in the Agriculture Business field include: Potential careers in the Agriculture Business field include: farm and ranch management, farm appraisal, agricultural accountant, employment with agricultural lenders and banks as loan officers, work with governmental agencies involved in loan supervision and agricultural lending.

The Associate in Science in Agriculture Business for Transfer Degree (AS-T in Agriculture Business) is intended for students who plan to complete a bachelor's degree in Agriculture Business at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree.

The Associate in Science in Agriculture Business for Transfer Degree (AS-T in Agriculture Business) may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Analyze financial records and develop financial documents required by agricultural lenders and commercial banks..*
2. *Describe the scope and economic significance of agriculture in the state of California.*
3. *Utilize the computer to create graphs, databases and to access information relevant to agricultural business.*
4. *Explain farm management concepts and practices utilized in agri-business including developing budgets, farm record analysis, profit and loss analysis.*
5. *Use knowledge of economic laws in order to facilitate and improve overall business operation.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN AGRICULTURE BUSINESS FOR TRANSFER DEGREE:

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of "C or better" or a "P" in all courses required for the major or area of emphasis

REQUIRED CORE: 13-15 UNITS

NR 200	[NP]	Soils	3 OR
CHEM 143	[NP]	Introductory College Chemistry	4 OR
CHEM 101	[NP]	General Chemistry 1	5
AGEC 210	[NP]	Elements of Agricultural Economics	3
MATH 134	[NP]	Elementary Statistics	4
ECON 101	[NP]	Principles of Macroeconomics	3

LIST A: SELECT THREE COURSES

AGEC 220	[NP]	Introduction to Agribusiness Management	3
AGEC 225	[NP]	Agriculture Computer Applications	3
ANSC 200	[NP]	Introduction to Animal Science	3 OR
PLSC 200	[NP]	Introduction to Plant Science	3
AGEC 200	[NP]	Agricultural Accounting and Analysis	3
AGEC 280	[NP]	Agricultural Sales and Service	3

LIST B: SELECT 0-9 UNITS

BUSAD 218	[NP]	Business Law	4
ANSC 230	[NP]	Poultry Science	3
ANSC 220	[NP]	Dairy Industry/Dairy Science	3
PLSC 230	[NP]	Fruit Science	3
EHS 210	[NP]	Introduction to Environmental Horticulture Science	3
AGM 235	[NP]	Irrigation and Drainage	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 22-33

GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	0-17
DOUBLE-COUNTED UNITS	12-16

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for the Associate in Science in Agriculture Business for Transfer degree.*

A.S. DEGREE:
AGRICULTURE BUSINESS

This program will develop and expand the student's knowledge of Agriculture Business. The student will develop knowledge and skills sufficient to gain and hold entry-level jobs in Ag Business. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Organize and prepare reports, presentations, and other financial documents used in making farm management decisions.*
2. *Assess supply and demand as it relates to local and regional agriculture business industries.*
3. *Make logical decisions based on the analysis of agriculture business trends.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the MJC Associate Degree Requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which includes completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259ABCD	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

AGEC 200	[NP]	Agricultural Accounting and Analysis	3
AGEC 210	[NP]	Elements of Agricultural Economics	3
AGEC 220	[NP]	Introduction to Agribusiness Management	3
AGEC 225	[NP]	Agriculture Computer Applications	3

IV. ELECTIVE COURSES - COMPLETE 4 UNITS

AGEC 280	[NP]	Agricultural Sales and Service	3
AGM 215	[NP]	Machinery Management	3
AGM 235	[NP]	Irrigation and Drainage	3
ANSC 201	[NP]	Beef Cattle Science	3
ANSC 202	[NP]	Swine Science	3
ANSC 203	[NP]	Sheep Science	3
ANSC 207	[NP]	Equine Science	3
ANSC 214	[NP]	Livestock Feeding and Nutrition	3
ANSC 220	[NP]	Dairy Industry/Dairy Science	3
ANSC 230	[NP]	Poultry Science	3
EHS 210	[NP]	Introduction to Environmental Horticulture Science	3
EHS 280	[NP]	Principles of Floral Art and Design	3
PLSC 205	[NP]	Field Crops	3
PLSC 215	[NP]	Vegetable Crops	3
PLSC 230	[NP]	Fruit Science	3
PLSC 250	[NP]	Plant Nutrition and Fertilizer	3
AG 305	[NP]	Supervision in Agriculture	2
AG 249	[NP]	Agriculture Internship	2
AG 101	[NP]	Leadership in Agriculture B	2

TOTAL UNITS IN A.S. MAJOR 30

*Required
**Internship/Work Experience must be Agriculture related
Note: For section 1: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259AC, or a combination of AG 249 and AG 259AB.

A.S. DEGREE:
AGRICULTURE: SALES, SERVICE

The student will learn step-by-step sales techniques, stage presence, self-evaluation of voice, habits, abilities in sales, and understanding of sales career. This program will help students make decisions as to whether or not they are qualified in sales, and prepare them for a sales career if they choose that vocation. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Evaluate market trends and create a marketing plan for an agriculture product or commodity.*
2. *Organize and prepare reports, presentations, and financial documents other information pertaining to agriculture business.*
3. *Create a customer profile and employ a sales strategy based on that profile*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education and Careers	1
AG 249**	[NP]	Agriculture Internship	2
AG 259ABCD**	[NP]	Agricultural Work Experience	1-4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

AGM 200	[NP]	Introduction to Mechanical Technology	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
PLSC 200	[NP]	Introduction to Plant Science	3

III. MAJOR REQUIRED COURSES - COMPLETE 12 UNITS

AGEC 200	[2, 3, 4]	Agricultural Accounting and Analysis	3
AGEC 210	[NP]	Elements of Agricultural Economics	3
AGEC 215	[NP]	Agricultural Marketing	3
AGEC 280	[1,2]	Agricultural Sales and Service .	3

IV. ELECTIVE COURSES - COMPLETE 3 UNITS

AG 285	[NP]	Agricultural Communications	3
AGEC 220	[2,4]	Introduction to Agribusiness Management	3
AGEC 225	[1]	Agriculture Computer Applications	3
COMM 100	[NP]	Fundamentals of Public Speaking	3 OR
COMM 102	[NP]	Introduction to Human Communication	3
ANY COURSE NOT TAKEN IN CORE MAJOR OR OPTIONS.			3

TOTAL UNITS IN A.S. MAJOR 29

**Required*
***Work experience/internship must be agriculture related.*
Note: For Section 1: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

CERTIFICATE OF ACHIEVEMENT: **AGRICULTURE: SALES, SERVICE TECHNICIAN**

The student will learn step-by-step sales techniques, stage presence, self-evaluation of voice, habits, abilities in sales, and understanding of sales career. This program will help students make decisions as to whether or not they are qualified in sales, and prepare them for a sales career if they choose that vocation. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Evaluate market trends and create a marketing plan for an agricultural product or commodity.*
2. *Organize and prepare reports, presentations, and financial documents pertaining to agriculture business.*
3. *Create a customer profile and employ a sales strategy based on that profile.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[2]	Agriculture Internship	2 OR
AG 259ABCD**	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3

III. MAJOR REQUIRED COURSES - COMPLETE 18 UNITS

AGEC 200	[NP]	Agricultural Accounting and Analysis	3
AGEC 210	[NP]	Elements of Agricultural Economics	3
AGEC 215	[NP]	Agricultural Marketing	3
AGEC 280	[NP]	Agricultural Sales and Service	3
COMM 100	[NP]	Fundamentals of Public Speaking	3 OR
COMM 102	[NP]	Introduction to Human Communication	3
AG 285	[NP]	Agricultural Communications	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 32

**Required*

***Internship/Work Experience must be Agriculture related*

Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

Agriculture Science
PROGRAM
(209) 575-6200

A.S. DEGREE:
AGRICULTURE SCIENCE

This Associate of Science degree will demonstrate students skills in the basics of Agriculture Science in order to help them obtain employment or transfer to a university. Contact the division office in the Agriculture Building on east campus for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Identify and appraise the educational requirements for career opportunities in the agriculture industry.*
2. *Analyze and communicate effectively core issues in the various fields of agriculture.*
3. *Integrate leadership aptitudes into one-on-one and group settings.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259ABCD**	[NP]	Agricultural Work Experience	1- 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[NP]	Elements of Agricultural Economics	3 OR
AGEC 200	[NP]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

AGM 210	[NP]	Agricultural Welding	3
EHS 280	[NP]	Principles of Floral Art and Design	3
ANSC 201	[NP]	Beef Cattle Science	3 OR
ANSC 202	[NP]	Swine Science	3 OR
ANSC 203	[NP]	Sheep Science	3
ANSC 230	[NP]	Poultry Science	3
EHS 210	[NP]	Introduction to Environmental Horticulture Science	3
PLSC 230	[NP]	Fruit Science	3
ANSC 220	[NP]	Dairy Industry/Dairy Science	3

IV. AGRICULTURE MAJOR ELECTIVE COURSES - COMPLETE 7 UNITS

ANY CLASS NOT USED IN AREA II & III

TOTAL UNITS IN A.S. MAJOR 30

**Required*
***Internship/Work Experience must be Agriculture related*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

A.S. DEGREE: AGRICULTURAL SCIENCES

ABOUT THIS EMPHASIS

This A.S. is designed as a University Preparation, Emphasis in Agricultural Sciences Degree. The University Preparation degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. While completion of this program does not guarantee admission to a specific college or university, it allows you to complete preparatory courses that may apply toward the area of study in which you plan to major at your targeted transfer university, and to complete general education requirements required by CSU and UC for bachelor's (baccalaureate) degree. It entails an interdisciplinary approach to learning that will allow you to simultaneously meet your unique transfer goals and fulfill lower division requirements for bachelor's degree at many CSU or UC institutions. You will do this by completing a rigorous general education experience with either the CSU-GE or IGETC general education patterns, in addition to completing an emphasis in a particular field or program. How does it work? Each emphasis has been crafted to help you prepare for upper-division coursework in a baccalaureate major at a four-year university. By fulfilling the requirements of the MJC emphasis, you will also be completing some or all lower-division preparation for baccalaureate major at the university. ASSIST (www.assist.org) is a statewide database of recorded transfer agreements between community colleges and universities. You are advised to use ASSIST in selecting courses from the emphasis to ensure that the coursework applies to your baccalaureate major. University Preparation with Emphasis Prepare for transfer with some majors at MJC. Not every program at MJC offers a degree designed for transfer-oriented students. However, many programs do offer AA or AS majors which function like the emphasis for transfer-oriented students.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Give specific examples of careers in the general agriculture area and briefly describe the prerequisites for these careers.*
2. *Describe the basic workforce readiness skills needed to be successful in agriculture careers today.*
3. *Describe the importance of the agriculture industry to the local, state and national economy.*

EMPHASIS REQUIREMENTS

To earn an Associate in Science degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES -COMPLETE 12 UNITS

AGEC 210	[NP]	Elements of Agricultural Economics	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
PLSC 200	[NP]	Introduction to Plant Science	3

ELECTIVE COURSES - COMPLETE 6 UNITS

AGEC 200	[NP]	Agricultural Accounting and Analysis	3
AGEC 225	[NP]	Agriculture Computer Applications	3
AGEC 280	[NP]	Agricultural Sales and Service	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGM 215	[NP]	Machinery Management	3
ANSC 201	[NP]	Beef Cattle Science	3
ANSC 202	[NP]	Swine Science	3
ANSC 203	[NP]	Sheep Science	3
ANSC 214	[NP]	Livestock Feeding and Nutrition	3
ANSC 215	[NP]	Animal Health and Sanitation	3
ANSC 220	[NP]	Dairy Industry/Dairy Science	3
ECON 101	[NP]	Principles of Macroeconomics	3
EHS 210	[NP]	Introduction to Environmental Horticulture Science	3
EHS 276	[NP]	Landscape Maintenance	3
MATH 111	[NP]	Applied College Algebra	3
MATH 134	[NP]	Elementary Statistics	4
MATH 138	[NP]	Calculus for Business & Social Sciences	3
NR 222	[NP]	Native Tree and Shrub Identification	3
PLSC 205	[NP]	Field Crops	3
PLSC 215	[NP]	Vegetable Crops	3
PLSC 230	[NP]	Fruit Science	3
PLSC 250	[NP]	Plant Nutrition and Fertilizer	3
PLSC 260	[NP]	Plant Disease Control	3

TOTAL UNITS REQUIRED IN A.S. MAJOR 18

Animal Science
PROGRAM
(209) 575-6200

A.S.-T DEGREE:
AGRICULTURE ANIMAL SCIENCES

The Associate in Science in Agriculture Animal Sciences Degree (AS-T in Agriculture Animal Sciences) is designed to prepare students who wish to transfer to a CSU and major in Agriculture Animal Sciences. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Agriculture Animal Sciences. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree.

This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate practical skills in animal husbandry in the areas of management, production, breeding, nutrition, health, safety and handling.*
2. *Explain and demonstrate techniques used in preparing animals for marketing, shows and exhibitions.*
3. *Identify and explain production parameters associated with efficient livestock and animal management (i.e. feed conversion rates, normal rates of gain, growth rates, reproduction rates etc.).*
4. *Explain the role of government agencies in regulating and monitoring various factors associated with livestock and animal production.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN AGRICULTURE ANIMAL SCIENCES FOR TRANSFER DEGREE:

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of "C or better" or a "P" for pass in all courses required for the major or area of emphasis

REQUIRED CORE: 14-15 UNITS

CHEM 101	[NP]	General Chemistry 1	5
OR			
CHEM 143	[NP]	Introductory College Chemistry	4
AGEC 210	[NP]	Elements of Agricultural Economics	3
OR			
ECON 102	[NP]	Principles of Microeconomics	3
ANSC 200	[NP]	Introduction to Animal Science	3
MATH 134	[NP]	Elementary Statistics	4

LIST A: SELECT ONE FROM EACH AREA LISTED BELOW:

AREA 1: ANIMAL PRODUCTION (3 UNITS)

ANSC 201	[NP]	Beef Cattle Science	3
ANSC 220	[NP]	Dairy Industry/Dairy Science	3
ANSC 207	[NP]	Equine Science	3
ANSC 230	[NP]	Poultry Science	3
ANSC 202	[NP]	Swine Science	3

AREA 2: ANIMAL HEALTH (3-5 UNITS)

ANSC 214	[NP]	Livestock Feeding and Nutrition	3
ANSC 215	[NP]	Animal Health and Sanitation	3
CHEM 112	[NP]	Organic Chemistry 1	5

LIST B: SELECT 0-8 UNITS

AGEC 200	[NP]	Agricultural Accounting and Analysis	3
ANSC 224	[NP]	Dairy Feeds & Feeding	3
ANSC 221	[NP]	Dairy Cattle Selection & Evaluation	3
PLSC 205	[NP]	Field Crops	3
AGM 235	[NP]	Irrigation and Drainage	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR ..... 20 - 32

GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	2-16
DOUBLE-COUNTED UNITS	13

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for the Associate in Science in Agriculture Animal Sciences for Transfer degree.*

A.S. DEGREE: ANIMAL SCIENCE

This degree provides the student with practical, hands-on experience in equine science.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Employ the scientific method to solve agriculture problems.*
2. *Demonstrate safe work habits.*
3. *Identify careers in the Animal Agriculture Industry and describe the skills needed for those careers.*
4. *Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259A-D **	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[NP]	Elements of Agricultural Economics	3 OR
AGEC 200	[NP]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS

ANSC 200	[NP]	Introduction to Animal Science	3
ANSC 201	[NP]	Beef Cattle Science	3
ANSC 202	[NP]	Swine Science	3
ANSC 203	[NP]	Sheep Science	3
ANSC 207	[NP]	Equine Science	3
ANSC 210	[NP]	Livestock Selection & Evaluation	3
ANSC 214	[NP]	Livestock Feeding and Nutrition	3
ANSC 215	[NP]	Animal Health and Sanitation	3

IV. ELECTIVE COURSES - COMPLETE 4 UNITS

Any 200 level Animal Science class not listed above
Any Agriculture class not used in Area II. for breadth core
Any Animal Science class not used in Area III. for major core
No more than two units of 300 level Agriculture classes

TOTAL UNITS IN A.S. MAJOR 30

**Required*
***Internship/Work Experience must be agriculture related.*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students need an additional 4 units in this section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

A.S. DEGREE: DAIRY SCIENCE

This program will develop entry-level jobs skills in Dairy husbandry and housing. Training and skill set development include; practical handling and safety skills, equipment handling and care, Dairy anatomy and nutrition, as well as breeding and reproduction skills. The program is designed for students that wish to develop practical skills in the area of Dairy Science.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe management techniques used by the Dairy industry.*
2. *Utilize a variety of technologies in the Dairy industry.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115*	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259 A-D	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[NP]	Elements of Agricultural Economics	3 OR
AGEC 200	[2,3,4]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

ANSC 220	[NP]	Dairy Industry/Dairy Science	3
ANSC 221	[NP]	Dairy Cattle Selection & Evaluation	3
ANSC 224	[NP]	Dairy Feeds & Feeding	3
ANSC 226	[NP]	Dairy Breeding & Selection	3

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 7 UNITS

ANSC 215	[NP]	Animal Health and Sanitation	3
ANSC 217	[NP]	Advanced Breeding & Artificial Insemination	4
ANSC 222	[NP]	Milk Production & Technology	3
ANSC 227	[NP]	Advanced Dairy Cattle Selection & Evaluation	3
ANSC 228	[NP]	Dairy Management	3
ANY 200 SERIES AGRICULTURE COURSE NOT TAKEN ABOVE			
1 UNIT MAXIMUM FROM ANY 300 SERIES AGRICULTURE COURSE			1

TOTAL UNITS IN A.S. MAJOR 30

**Required*
***Internship/Work Experience must be Agriculture related.*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

A.S. DEGREE:
POULTRY SCIENCE

In this program the student will develop skills and knowledge sufficient to enter the Poultry industry or to transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Employ the scientific method to solve agriculture problems.*
2. *Describe basic techniques used by the Poultry Science industry to produce wholesome, safe, environmentally responsible animal products.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259A-D**	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[NP]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[NP]	Elements of Agricultural Economics	3 OR
AGEC 200	[NP]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 12 UNITS

ANSC 230	[NP]	Poultry Science	3
ANSC 214	[NP]	Livestock Feeding and Nutrition	3 OR
ANSC 235	[NP]	Poultry Diseases and Housing	3 OR
ANSC 215	[NP]	Animal Health and Sanitation	3
AGEC 220	[NP]	Introduction to Agribusiness Management	3
ANSC 232	[NP]	Avian Practices	3
ANSC 236	[NP]	Poultry Breeding & Selection	3

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 4 UNITS

ANY 200 LEVEL ANIMAL SCIENCE CLASS THAT IS NOT LISTED ABOVE
ANY 200 LEVEL AGRICULTURE ECONOMICS CLASS NOT LISTED ABOVE
ANY AGRICULTURE CLASS NOT USED IN AREA II. FOR BREADTH CORE
NO MORE THAN TWO UNITS OF 300 LEVEL AGRICULTURE CLASSES

TOTAL UNITS IN A.S. MAJOR 30

**Required*
***Internship/Work Experience must be Agriculture related*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

A.S. DEGREE: VETERINARY TECHNOLOGY

This program will provide students with the quickly evolving technical skills of the veterinary industry. Training and skill development include; the study of anatomy and physiology, disease management and prevention, client communication, animal restraint and behavior recognition, equipment maintenance, pharmaceutical calculations and emergency procedures in animal medicine. After successful completion of the program, graduates will be able to enter the workforce as veterinary assistants, lab assistants, kennel assistants, diagnostic equipment assistants, office personal and Registered Veterinary Technician Exam applicants. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Analyze the relationship of anatomy and physiology as it relates to animal health and disease prevention.*
2. *Describe the importance of proper sanitation and zoonotic disease prevention in a veterinary practice.*
3. *Demonstrate common surgical, dental and restraint techniques in a veterinary practice.*
4. *Identify the role that a veterinary technician plays in the industry and how that role varies depending on the specialty of a practice.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include the completion of the requirements below.

AGRICULTURE CAREER COURSES - COMPLETE 4 UNITS

AG 115	[1]	Introduction to Agricultural Education & Careers	1
AG 249	[NP]	Agriculture Internship	2
AG 259ABCD	[1]	Agricultural Work Experience	1 - 4

AGRICULTURE SCIENCE BREADTH COURSES-COMPLETE 9 UNITS

ANSC 200	[2]	Introduction to Animal Science	3
PLSC 200	[2]	Introduction to Plant Science .	3
NR 200	[3]	Soils	3
AGEC 210	[4]	Elements of Agricultural Economics	3
AGEC 225	[4]	Agriculture Computer Applications	3

MAJOR REQUIRED COURSES-COMPLETE 8 UNITS

ANSC 251	[1]	Veterinary Pharmacy Procedures	2
ANSC 252	[2]	Veterinary Equipment: Operation, Instrumentation, and Safety	3
ANSC 253	[3]	Veterinary Laboratory Procedures	1
ANSC 254	[2]	Veterinary Medical Office Procedure	2

CHOOSE ONE OPTION BELOW: SMALL ANIMAL OR LARGE ANIMAL OPTION-COMPLETE 9 UNITS

SMALL ANIMAL SCIENCE OPTION-COMPLETE 9 UNITS

ANSC 250	[1]	Veterinary Physiology, Anatomy, & Terminology	3
ANSC 255	[1]	Preparation for Veterinary Surgical and Dental Assistance	3
ANSC 256	[1]	Veterinary Assistance & Nursing: Emergency Procedures	1
ANSC 257	[2]	Veterinary Assistance and Nursing: Animal Handling	2

LARGE ANIMAL SCIENCE OPTION- COMPLETE 9 UNITS

ANSC 270	[1]	Veterinary Large Animal Physiology, Anatomy & Terminology	3
ANSC 271	[2]	Large Animal Veterinary Surgical and Dental Assistant	3
ANSC 272	[1]	Veterinary Large Animal Emergency Procedures	1
ANSC 273	[2]	Veterinary Large Animal Handling	2

**Note: For Section 1: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.*

TOTAL UNITS IN A.S. MAJOR..... 30

CERTIFICATE OF ACHIEVEMENT: ARTIFICIAL INSEMINATION TECHNICIAN

The student will develop skills and knowledge sufficient enough to collect bull semen, artificially inseminate cows, and to evaluate pedigrees. The student will also develop skills in basic salesmanship. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Give specific examples of careers in the Artificial Insemination industry.*
2. *Describe technologies used in the Artificial Insemination industry.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[2]	Agriculture Internship	2
AG 259A-D **	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 6 UNITS

AGEC 200	[NP]	Agricultural Accounting and Analysis	3
AGEC 280	[NP]	Agricultural Sales and Service	3

III. MAJOR REQUIRED COURSES - COMPLETE 13 UNITS

ANSC 201	[NP]	Beef Cattle Science	3
ANSC 220	[NP]	Dairy Industry/Dairy Science	3
ANSC 217	[NP]	Advanced Breeding & Artificial Insemination	4
ANSC 226	[NP]	Dairy Breeding & Selection	3

IV. ELECTIVE COURSES - COMPLETE 3 UNITS

ANSC 224	[NP]	Dairy Feeds & Feeding	3 OR
ANSC 214	[NP]	Livestock Feeding and Nutrition	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 27

**Required*

***Internship/Work Experience must be Agriculture related*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

CERTIFICATE OF ACHIEVEMENT: **EQUINE SCIENCE**

This program will develop entry-level jobs skills in equine husbandry and housing. Training and skill set development include; practical handling and safety skills, equipment handling and care, equine anatomy and nutrition, as well as breeding and reproduction skills. The program is designed for students that wish to develop practical skills in the area of equine science.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Design and implement a complete nutritional program for equines in various life stages.*
2. *Demonstrate advanced equine handling skills.*
3. *Describe current trends in equine reproduction, mare and foal care.*
4. *Demonstrate competent riding skills in various situations using various disciplines.*
5. *Using current equine industry standards, demonstrate management skills in the operation of an equine facility.*
6. *Describe ideal equine conformation and subsequent ailments associated with deviations from such conformation.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in Equine Science, the student must complete a minimum of 16 units of course work. Each course must be completed with a "C" or better.

REQUIRED COURSES - COMPLETE 14 UNITS

ANSC 207	[1]	Equine Science	3
ANSC 209	[2]	Equine Breeding & Reproduction	3
ANSC 243	[2]	Equine Fitting and Showing	2
ANSC 258	[1]	Beginning Horsemanship	3
ANSC 265	[1]	Introduction to Colt Training	3

ELECTIVE COURSES-CHOOSE ONE COURSE:

ANSC 200	[1]	Introduction to Animal Science	3
ANSC 259	[2]	Pack Animal - Walk/Ride	2
ANSC 260	[2]	Advanced Horsemanship	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 16 - 17

CERTIFICATE OF ACHIEVEMENT: **LARGE ANIMAL VETERINARY TECHNICIAN**

This program will develop jobs skills in large animal veterinary technology as well as assist students with the qualifications set by the state of California for the Registered Veterinary Technician License. Training and skill set development include; practical handling and safety skills, equipment handling and care, large animal anatomy and nutrition, as well as diagnostic procedure and surgical assistance techniques. The program is designed for students that wish to develop practical skills in the area of large animal veterinary technology.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe the role of an RVT in a large animal practice.*
2. *Demonstrate advanced large animal handling and restraint skills.*
3. *Describe current trends in large animal medical care.*
4. *Demonstrate the use and maintenance of industry relative diagnostic equipment.*
5. *Using current veterinary industry standards, describe standard medical treatments for common large animal aliments.*
6. *Describe functional anatomy in various large animal species and how this anatomy dictates different medical procedures.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 17 UNITS

ANSC 270	[1]	Veterinary Large Animal Physiology, Anatomy & Terminology	3
ANSC 251	[2]	Veterinary Pharmacy Procedures	2
ANSC 252	[2]	Veterinary Equipment: Operation, Instrumentation, and Safety	3
ANSC 253	[1]	Veterinary Laboratory Procedures	1
ANSC 254	[2]	Veterinary Medical Office Procedures	2
ANSC 271	[2]	Large Animal Veterinary Surgical and Dental Assistant	3
ANSC 272	[1]	Veterinary Large Animal Emergency Procedures	1
ANSC 273	[2]	Veterinary Large Animal Handling	2

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 17

CERTIFICATE OF ACHIEVEMENT: **VETERINARY TECHNICIAN**

In this program, the student will develop skills and knowledge for entry level employment in the field of veterinary technology. This field may include small and exotic animal care, veterinary laboratory procedures and surgical techniques as well as x-ray technology, specialty animals, large animals and veterinary office procedures. This program will also assist the student in qualification for the California Registered Veterinary Technician Examination by providing the educational requirements mandated by the Veterinary Medical Board.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Give specific examples of careers in the Animal Agriculture industry and briefly describe the prerequisites for these careers.*
2. *Describe basic management techniques used by the Animal Science industry to produce wholesome, safe, environmentally responsible animal products.*
3. *Utilize a variety of technologies to gain information about the Animal Agriculture industry and apply these technologies in the analysis of specific situations.*
4. *Describe the economic significance of a specific area studied in animal science and explain the social/cultural benefits provided by that industry.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 17 UNITS

ANSC 250	[2]	Veterinary Physiology, Anatomy, & Terminology	3
ANSC 251	[3]	Veterinary Pharmacy Procedures	2
ANSC 252	[4]	Veterinary Equipment: Operation Instrumentation and Safety	3
ANSC 253	[1]	Veterinary Laboratory Procedures	1
ANSC 254	[4]	Veterinary Medical Office Procedures	2
ANSC 255	[3]	Preparation for Veterinary Surgical and Dental Assistance	3
ANSC 256	[3]	Veterinary Assistance & Nursing: Emergency Procedures	1
ANSC 257	[4]	Veterinary Assistance & Nursing: Animal Handling	2

ELECTIVE COURSES – (NOT REQUIRED FOR CERTIFICATE)

BIO 111	[3]	General Biology	4
ANSC 55	[1]	Introduction to Veterinary Technology	3
ANSC 200	[1]	Introduction to Animal Science	3
ANSC 215	[3]	Animal Health and Sanitation	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 17

**NOTE: To become a registered veterinary technician, students must meet specific requirements established by the AVMA (American Veterinary Medical Association). Please contact the MJC Agriculture Division office for advising.*

Anthropology
PROGRAM
(209) 575-6129

A.A.-T DEGREE:
ANTHROPOLOGY

ABOUT THIS AWARD

The Associate in Arts in Anthropology for Transfer Degree includes lower division coursework that is required for transfer. Anthropology examines the broad conditions and experiences of becoming and being human through a myriad of lenses: genetics and evolution, comparative primate anatomy and behavior, the bioarchaeological record, language forms, and culture. The Associate in Arts in Anthropology for Transfer Degree will provide foundational training for students in anthropological concepts, methods of inquiry, and theories of human variation, change and adaptation. All academic subfields of anthropology are emphasized at MJC, including biological anthropology, cultural anthropology, linguistic anthropology and archaeology. Students will learn how to utilize and apply anthropology and its scientific and humanistic modalities. Across broad coursework, students will discover the uniqueness of being biologically human and engage the role of culture and language in the histories and politics of an interconnected, global world.

The Associate in Arts in Anthropology for Transfer Degree is intended for students who plan to complete a bachelor's degree in Anthropology at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or Anthropology. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE A.A. DEGREE IN ANTHROPOLOGY FOR TRANSFER:

1. *A minimum of 18 semester units or 27 quarter units in the major with a grade of C or better or "P" (Pass) while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.*
2. *Completion of 60 semester or 90 quarter CSU-transferable units using the CSU-GE Breadth or the IGETC pattern.*
3. *Exactly 60 semester units or 90 quarter units are required for the degree.*

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe the basic concepts, methods of inquiry, and the theories of biological, cultural, linguistic and archaeological anthropology.*
2. *Explain how the scientific method serves as a foundation for understanding the observed variation, change and adaptation of humans and their environments.*
3. *Use anthropological perspectives to interpret evolutionary, historical and contemporary issues.*

REQUIRED CORE: (9 UNITS)

ANTHR 101	[NP]	Biological Anthropology	3
ANTHR 102	[NP]	Cultural Anthropology.	3
ANTHR 130	[NP]	Archaeology & Cultural Prehistory	3

LIST A: (4 UNITS)

ANTHR 104	[NP]	Linguistic Anthropology	3 AND
ANTHR 105	[NP]	Biological Anthropology Lab.	1
MATH 134	[NP]	Elementary Statistics	4

LIST B: SELECT ONE TO TWO (3-4 UNITS)

ANY LIST A COURSE NOT ALREADY USED	3-4

AREA 1: SCIENCE METHODS

PHILO 107	[NP]	Philosophy of Science	3
PSYCH 102	[NP]	Research Methods	3

AREA 2: SCIENCES

ANAT 125	[NP]	Human Anatomy	4
EASCI 161	[NP]	Earth Science	4
GEOL 161	[NP]	Physical Geology	4

LIST C: 3 UNITS

ANY LIST A OR B COURSE NOT ALREADY USED			3
ANTHR 107	[NP]	Forensic Anthropology Introduction	3
ANTHR 140	[NP]	Magic, Witchcraft, and Religion	3
ANTHR 150	[NP]	Native People of North America	3
ANTHR 174	[NP]	Anthropology Summer Field Studies	3

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 19-25

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	20-22
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVES (AS NEEDED)	20-26

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

Art
PROGRAM
(209) 575-6081

A.A.-T DEGREE:
ART HISTORY

The Associate in Arts in Art History for Transfer Degree is intended for students who plan to complete a bachelor's degree in Art History or other related subjects (Humanities, History, Philosophy, Interdisciplinary Studies etc.) at a CSU campus. Coursework will provide students with the study and critical analysis of great works of human expression and imagination will allow students to identify the role of the visual arts in traditional and contemporary culture, and further prepare them for the meaningful interpretation of artworks.

The Associate in Arts in Arts History for Transfer Degree is intended for students who plan to complete a bachelor's degree in Studio Arts at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate preparedness to successfully continue studies in Art History or a related subject at an upper-division level.*
2. *Learn the major monuments and masterpieces of the great art periods from the prehistoric to the Modern era discern how man expresses himself through these works.*
3. *Demonstrate and understanding of the chronology of art developments and the vocabulary terms employed in the discussion of these developments.*
4. *Evaluate the basic qualities of an artwork, i.e. style, composition, color, technique, and medium.*
5. *Evaluate original works of art by visiting significant art museums in the San Francisco Bay Area or elsewhere.*
6. *Reproduce, render, and interpret ideas in a variety of media through participation in studio arts classes.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN ART HISTORY FOR TRANSFER DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or a "P" (Pass).

REQUIRED CORE: (COMPLETE 9 UNITS)

ART 120	[1]	Basic Drawing 1	3
ART 164	[1]	History of Art 1: Prehistoric to Gothic	3
ART 165	[2]	History of Art 2: Renaissance to Contemporary	3

LIST A: (3 UNITS)

ART 169	[2]	Survey of Asian Art	3

LIST B: (SELECT ONE: 3 UNITS)

ART 102	[NP]	Introduction to Computer Graphics	3
ART 108	[NP]	Ceramics 1	3
ART 123	[NP]	Figure Drawing	3
ART 124	[NP]	Color and 2-D Foundation Design	3
ART 125	[NP]	Color and 3-D Foundation Design	3
ART 140	[NP]	Sculpture 1	3
ART 147	[NP]	Painting 1 (in Acrylic)	3
ART 148	[NP]	Painting 1 (in Oil)	3
ART 170	[NP]	Basic Photography	3 OR
ART 173	[NP]	Basic Digital Photography	3

LIST C: (SELECT ONE: 3-5 UNITS)

ANY COURSE FROM LIST A OR B NOT ALREADY USED			3
ART 162	[NP]	History of Renaissance Art	3
ART 163	[NP]	History of Modern Art	3
ART 168	[NP]	History of Photography	3
FREN 101	[NP]	French 1	5
GERM 101	[NP]	German 1	5
ITAL 101	[NP]	Italian 1	5
SPAN 101	[NP]	Spanish 1	5

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 18-20

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6-9
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	9-12

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

A.A.-T DEGREE: STUDIO ARTS

The Associate in Arts in Studio Arts for Transfer Degree focuses on the theory and practice of visual arts skills based on a foundation of both traditional and contemporary practices, with curriculum geared toward transfer to a CSU. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Studio Arts. Coursework will provide students with a variety of two- and three-dimensional media in which to develop their capacity to solve problems in new and creative ways. The study and critical analysis of great works of human expression and imagination will allow students to identify the role of the visual arts in traditional and contemporary culture, and further prepare them for meaningful participation in society as visual artists.

The Associate in Arts in Studio Arts for Transfer Degree is intended for students who plan to complete a bachelor's degree in Studio Arts at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE A.A. DEGREE IN STUDIO ARTS FOR TRANSFER:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate preparedness to successfully continue studies in Studio Art at an upper division level.*
2. *Reproduce, render, and interpret ideas in a variety of media through observation.*
3. *Plan, design, and produce original works of art.*
4. *Make informed assessments of quality and effectiveness in works of art, including their own.*
5. *Identify and distinguish various historical periods of art and trends of contemporary practice.*

REQUIRED CORE: (12 UNITS)

ART 120	[1]	Basic Drawing 1	3
ART 124	[1]	Color and 2 D Foundation Design	3
ART 125	[2]	Color and 3-D Foundation Design	3
ART 165	[2]	History of Art 2: Renaissance to Contemporary	3

LIST A: (3 UNITS)

ART 163	[NP]	History of Modern Art	3
ART 164	[NP]	History of Art 1: Prehistoric to Gothic	3
ART 169	[NP]	Survey of Asian Art	3

LIST B: (9 UNITS)

ART 123	[NP]	Figure Drawing	3 OR
ART 121	[NP]	Basic Drawing 2	3
ART 147	[NP]	Painting 1 (in Acrylic)	3
ART 148	[NP]	Painting 1 (in Oil)	3
ART 108	[NP]	Ceramics 1	3
ART 140	[NP]	Sculpture 1	3
ART 102	[NP]	Introduction to Computer Graphics	3
ART 170	[NP]	Basic Photography	3
ART 173	[NP]	Basic Digital Photography	3

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 24

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6
GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	3-5

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

A.A. DEGREE: **ART**

The comprehensive MJC Art Program offers several areas of concentration: art history, ceramics, computer graphics, drawing, design, sculpture, water color painting, oil painting, museum studies, and photography. The program is designed to include pre-professional and professional courses, personal enrichment in specific art areas, and classes for students who plan an art-related career. Art courses help students develop a capacity for visual analysis and the ability to solve problems in new and creative ways.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate preparedness to successfully continue studies in art at an upper division level.*
2. *Reproduce, render, and interpret in a variety of media through observation.*
3. *Plan, design, and produce original works of art.*
4. *Make informed assessments of quality and effectiveness in works of art, including their own.*
5. *Identify and distinguish various historical periods of art.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below. Students who plan to transfer to a four-year college or university should consult with an Art faculty advisor and a counselor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 9 UNITS

ART 120	[1]	Basic Drawing 1	3
ART 124	[2]	Color and 2-D Foundation Design	3
ART 164	[NP]	History of Art 1: Prehistoric to Gothic	3 OR
ART 165	[NP]	History of Art 2: Renaissance to Contemporary	3

ELECTIVE COURSES -COMPLETE 11 UNITS, WITH NO MORE THAN 1 COURSE IN EACH AREA

DESIGN AND DRAWING AREA

ART 121	[2]	Basic Drawing 2	3
ART 123	[2]	Figure Drawing	3
ART 125	[3]	Color and 3-D Foundation Design	3

THREE-DIMENSIONAL ART AREA

ART 108	[1]	Ceramics 1	3
ART 140	[1]	Sculpture 1	3

PAINTING AND PRINTMAKING AREA

ART 147	[3]	Painting 1 (In Acrylic)	3
ART 148	[2]	Painting 1 (In Oil)	3

ART HISTORY AND APPRECIATION AREA

ART 162	[NP]	History of Renaissance Art	3
ART 163	[NP]	History of Modern Art	3
ART 164	[NP]	History of Art 1: Prehistoric to Gothic	3
ART 165	[NP]	History of Art 2: Renaissance to Contemporary	3
ART 168	[1]	History of Photography	3
ART 169	[NP]	Survey of Asian Art	3

PHOTOGRAPHY AND COMPUTER GRAPHICS AREA

ART 102	[1]	Introduction to Computer Graphics	3
ART 170	[1]	Basic Photography	3
ART 173	[NP]	Basic Digital Photography	3

TOTAL UNITS IN A.A. MAJOR 20

A. A. DEGREE: **PHOTOGRAPHY**

Photography is both an artistic and a technical vocation. This program is designed to develop the student's aesthetic and technical abilities by working with design, composition, lighting, various types of image content, photographic processes, image critique, and presentation techniques.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate preparedness to successfully continue studies in art at an upper division level.*
2. *Represent and interpret aspects of their physical and social environment in a variety of photography-related media.*
3. *Plan, design, and produce original works of art.*
4. *Make informed assessments of quality and effectiveness in works of art, including their own.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below. Courses should be selected with the assistance of a Photography faculty advisor. Students who plan to transfer to a four-year college or university should consult with a Photography faculty advisor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 18 UNITS

ART 124	[2]	Color and 2-D Foundation Design	3
ART 168	[1]	History of Photography	3
ART 170	[1]	Basic Photography	3
ART 172	[2]	Intermediate Photography	3
ART 173	[3]	Basic Digital Photography	3
ART 175	[3]	Color Photography	3

ELECTIVE COURSES - COMPLETE AT LEAST 2 UNITS

Art 102	[NP]	Introduction to Computer Graphics	3 OR
CMPGR 202	[NP]	Introduction to Computer Graphics	3
ART 163	[NP]	History of Modern Art	3
ART 165	[NP]	History of Art 2: Renaissance to Contemporary	3
ART 169	[NP]	Survey of Asian Art	3
ART 192	[NP]	Professional Practices	2

MINIMUM UNITS IN A.A. MAJOR 20-21

**Photography courses are listed under ART courses starting on page 279.*

Athletic Training/Sports Medicine PROGRAM
(209) 575-6269

A.S. DEGREE:
ATHLETIC TRAINING/SPORTS MEDICINE

The Athletic Training/Sports Medicine program at MJC is designed to prepare students for appropriate procedures in prevention, care, and rehabilitation of athletic injuries. This degree is also designed to transfer students to four-year institutions where they can continue their education to fulfill the requirements of the National Athletic Trainer's Association. This will lead to the student's eventual eligibility to challenge the national examination, and upon satisfactory completion of the required Courses and passing the exam, become a Certified Athletic Trainer.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Successfully transfer to a four (4) year degree program.*
2. *Apply critical thinking to design and monitor preventive and rehabilitative plans, as well as provide emergency care.*
3. *Successfully perform NATA competencies, and be well versed in NATA perspectives, current research, and procedures.*
4. *Comply with degree related institutional GELO's.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Athletic Training/Sports Medicine Pathway, which include completion of the requirements below. Courses should be selected with the assistance of an Athletic Training faculty adviser.

REQUIRED COURSES - COMPLETE 29 UNITS

PE 108	[NP]	Care and Prevention of Athletic Injuries	3
PE 111	[NP]	Application of Sports Medicine	3
PE 141	[NP]	Supervision in Athletic Training	2
ANAT 125	[NP]	Human Anatomy	4
CHEM 143	[NP]	Introductory College Chemistry	4
HE 101	[NP]	Emergency Medical Response; CPR PRO/Healthcare Provider	3
HE 110	[NP]	Healthful Living	3
PHYSO 101	[NP]	Introductory Human Physiology	4
PSYCH 101	[NP]	General Psychology	3

TOTAL UNITS A.S. MAJOR 29

Autobody/Collision PROGRAM
(209) 575-6332

CERTIFICATE OF ACHIEVEMENT:
AUTOBODY/COLLISION REPAIR

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory, and hands-on activities required to perform practical repair operations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Comply with current Auto Body industry safety and environmental standards.*
2. *Perform Auto Body repairs in accordance with industry standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 19 UNITS

AUBDY 301	[1]	Automotive Collision Repair 1	4
AUBDY 302	[2]	Automotive Collision Repair 2	4
AUBDY 303	[3]	Automotive Collision Repair 3	4
AUBDY 321	[1]	Automotive Spray Refinishing 1	3
AUBDY 322	[2]	Automotive Spray Refinishing 2	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 19

Autobody/Refinishing
PROGRAM
(209) 575-6332

A.S. DEGREE:
AUTOBODY/REFINISHING

The Auto Body Program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory, and hands-on activities required to perform practical repair operations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Comply with current industry safety and environmental regulations.*
2. *Perform repairs according to manufacturers' recommendations.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway (p. 90) or the University Preparation Pathway (p. 85) which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 22 UNITS

AUTEC 200	[3]	Automotive Service Management	3
AUBDY 301	[1]	Automotive Collision Repair 1	4
AUBDY 302	[2]	Automotive Collision Repair 2	4
AUBDY 303	[3]	Automotive Collision Repair 3	4
AUBDY 321	[1]	Automotive Spray Refinishing 1	3
AUBDY 322	[2]	Automotive Spray Refinishing 2	4

TOTAL UNITS IN A.S. MAJOR 22

SKILLS RECOGNITION AWARD:
AUTOBODY/REFINISHING

The Auto Body Program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory, and hands-on activities required to perform practical repair operations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Comply with current industry safety and environmental regulations.*
2. *Perform basic refinishing techniques in accordance with industry standards.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award in Autobody/Refinishing, student must complete 11 units required with a grade of C or better.

REQUIRED COURSES - COMPLETE 11 UNITS

AUBDY 301	[1]	Automotive Collision Repair 1	4
AUBDY 321	[1]	Automotive Spray Refinishing 1	3
AUBDY 322	[2]	Automotive Spray Refinishing 2	4

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 11

Automotive Technology
PROGRAM
(209) 575-6332

A.S. DEGREE:
AUTOMOTIVE TECHNICIAN

The Automotive Technology program is a sequence of courses designed to prepare students for entry level employment opportunities in the automotive service industry. In addition to gaining the skills required to maintain, diagnose and repair automobiles successful students will have received the knowledge needed to prepare them for the nationally recognized Automotive Service Excellence (ASE) examinations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current automotive industry safety and environmental standards.*
2. *Perform maintenance and repair operations in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree: Automotive Technician, the student must complete 32.5 total units of required and elective courses and complete the Career and Technical Education Pathway requirements.

REQUIRED COURSES - COMPLETE 14.5 UNITS

AUTEC 200	[1]	Automotive Service Management	3
AUTEC 311	[1]	Basic Automotive Systems	4
AUTEC 368	[1,2]	A6: Automotive Electricity/Electronic Systems 1	3.5
AUTEC 369	[2,3]	A6: Automotive Electricity 2	4

ELECTIVE COURSES - COMPLETE 18 UNITS

AUTEC 211	[2,3]	Intro to Alternative Fuels and Advanced Technology Vehicles	3
AUTEC 317	[2]	Auto Heating & Air Conditioning	3.5
AUTEC 319	[2,3]	A8: Engine Performance	3.5
AUTEC 320	[3,4]	L1: Advance Engine Performance	4
AUTEC 321	[2]	A5: Brakes Systems	3.5
AUTEC 322	[2]	A4: Steering, Suspension and Alignment	3.5
ELTEC 208	[2]	Fundamentals of Electricity and Electronics	3

TOTAL UNITS IN A.S. MAJOR 32.5

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE BRAKES AND SUSPENSION**

The Automotive Technology program is a sequence of courses designed to prepare students for entry level employment opportunities in the automotive service industry. In addition to gaining the skills required to maintain, diagnose and repair automobiles successful students will have received the knowledge needed to prepare them for the nationally recognized Automotive Service Excellence (ASE) examinations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current automotive industry safety and environmental standards.*
2. *Perform maintenance and repair operations to vehicle braking and suspension systems in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 17.5 UNITS

AUTEC 311	[1]	Basic Automotive Systems	4
AUTEC 200	[1]	Automotive Service Management	3
AUTEC 368	[1, 2]	A6: Automotive Electricity/Electronic Systems 1	3.5
AUTEC 321	[2]	A5: Brakes Systems	3.5
AUTEC 322	[2]	A4: Steering, Suspension and Alignment	3.5

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....17.5

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE DIAGNOSIS**

The Automotive Technology program is a sequence of courses designed to prepare students for entry level employment opportunities in the automotive service industry. In addition to gaining the skills required to maintain, diagnose and repair automobiles successful students will have received the knowledge needed to prepare them for the nationally recognized Automotive Service Excellence (ASE) examinations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current automotive safety and environmental standards.*
2. *Diagnose and repair automotive drivability problems in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 27 UNITS

AUTEC 311	[1]	Basic Automotive Systems	4
AUTEC 211	[2]	Intro to Alternative Fuels and Advanced Technology Vehicles	3
AUTEC 368	[1]	A6: Automotive Electricity/Electronic Systems 1	3.5
AUTEC 369	[2]	A6: Automotive Electricity 2	4
AUTEC 319	[2]	A8: Engine Performance	3.5
AUTEC 320	[3]	L1: Advanced Engine Performance	4
AUTEC 373	[3]	Clean Air Car Course	5

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 27

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE ENGINES AND TRANSMISSIONS**

The Automotive Technology program is a sequence of courses designed to prepare students for entry level employment opportunities in the automotive service industry. In addition to gaining the skills required to maintain, diagnose and repair automobiles successful students will have received the knowledge needed to prepare them for the nationally recognized Automotive Service Excellence (ASE) examinations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current automotive industry safety and environmental standards.*
2. *Perform maintenance and repair operations to automotive engines and transmissions in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - 21 UNITS

AUTEC 311	[1]	Basic Automotive Systems	4
AUTEC 200	[1]	Automotive Service Management	3
AUTEC 368	[1, 2]	A6: Automotive Electricity/Electronic Systems 1	3.5
AUTEC 315	[2]	A1: Engine Repair	3.5
AUTEC 323	[2]	A2: Automatic Transmission & Transaxles	3.5
AUTEC 324	[2]	A3: Manual Transmission and Drive Axles	3.5

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 21

CERTIFICATE OF ACHIEVEMENT: **AUTOMOTIVE SERVICE**

The Automotive Technology program is a sequence of courses designed to prepare students for entry level employment opportunities in the automotive service industry. In addition to gaining the skills required to maintain, diagnose and repair automobiles successful students will have received the knowledge needed to prepare them for the nationally recognized Automotive Service Excellence (ASE) examinations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current automotive industry safety and environmental standards.*
2. *Perform routine vehicle service operations in accordance with ASE standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 10.5 UNITS

AUTEC 200	[1]	Automotive Service Management	3
AUTEC 311	[1]	Basic Automotive Systems	4
AUTEC 368	[1, 2]	A6: Automotive Electricity/Electronic Systems 1	3.5

ELECTIVE COURSES - COMPLETE 21 UNITS

AUTEC 315	[2, 3]	A1: Engine Repair	3.5
AUTEC 317	[2, 3]	Auto Heating & Air Conditioning	3.5
AUTEC 321	[2, 3]	A5: Brakes Systems	3.5
AUTEC 322	[2, 3]	A4: Steering, Suspension and Alignment	3.5
AUTEC 323	[2, 3]	A2: Automatic Transmission & Transaxles	3.5
AUTEC 324	[2, 3]	A3: Manual Transmission and Drive Axles	3.5
AUTEC 369	[2, 3]	A6: Automotive Electricity 2	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 31.5

Biological Sciences PROGRAM (209) 575-6173

A.S. DEGREE: **BIOLOGICAL SCIENCES**

ABOUT THIS EMPHASIS

This A.S. is designed as a University Preparation, Emphasis in Biological Sciences. The University Preparation degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. While completion of this program does not guarantee admission to a specific college or university, it allows you to complete preparatory courses that may apply toward the area of study in which you plan to major at your targeted transfer university, and to complete general education requirements required by CSU and UC for bachelor's (baccalaureate) degree. It entails an interdisciplinary approach to learning that will allow you to simultaneously meet your unique transfer goals and fulfill lower division requirements for bachelor's degree at many CSU or UC institutions. You will do this by completing a rigorous general education experience with either the CSU-GE or IGETC general education patterns, in addition to completing an emphasis in a particular field or program. How does it work? Each emphasis has been crafted to help you prepare for upper-division coursework in a baccalaureate major at a four-year university. By fulfilling the requirements of the MJC emphasis, you will also be completing some or all lower-division preparation for baccalaureate major at the university. ASSIST (www.assist.org) is a statewide database of recorded transfer agreements between community colleges and universities. You are advised to use ASSIST in selecting courses from the emphasis to ensure that the coursework applies to your baccalaureate major. University Preparation with Emphasis Prepare for transfer with some majors at MJC. Not every program at MJC offers a degree designed for transfer-oriented students. However, many programs do offer AA or AS majors which function like the emphasis for transfer-oriented students. Those majors are included on the following pages to help you make the right decision when determining the best transfer-oriented path of study.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply the scientific method of discovery to problem solving situations in biology, mathematics, and chemistry.*
2. *Proficiently use the scientific vocabulary, including the key terms and concepts in biology, chemistry, and mathematics.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. See counselor or advisor for selection of courses.

REQUIRED COURSES – TAKE 12 UNITS

BIO 101	[NP]	Biological Principles	4
BOT 101	[NP]	General Botany	4
ZOOL 101	[NP]	General Zoology	4

ELECTIVE COURSES – TAKE 9-10 UNITS

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select 2 courses within one discipline from the following list of electives. Additional courses may be required by your transfer university.

CHEM 101	[NP]	General Chemistry 1	5
CHEM 102	[NP]	General Chemistry 2	5
MATH 134	[NP]	Elementary Statistics	4
MATH 171	[NP]	Calculus: First Course	4
MATH 172	[NP]	Calculus: Second Course	4
PHYS 142	[NP]	Mechanics, Heat, & Waves	4
PHYS 143	[NP]	Electricity, Magnetism, Optics, Atomic and Nuclear Structure	4

TOTAL UNITS REQUIRED IN A.S. MAJOR 21-22

Bookkeeping
PROGRAM
(209) 575-6129

A.S. DEGREE: BOOKKEEPING

In the Bookkeeping Program, students learn to analyze and enter transactions in journals, post to ledgers, complete worksheets, prepare the company's payroll, calculate employer payroll taxes, prepare the federal and state payroll tax forms, use various bookkeeping registers, prepare adjusting and closing entries, prepare classified earnings and capital statements, and prepare balance sheets. Students also learn about depreciation, bad debts, cost of goods sold, notes receivable, notes payable, inventory valuation and business taxes. The use of computers is also an important part of the Bookkeeping Program.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment as an entry-level bookkeeper.*
3. *Demonstrate the working knowledge required to perform the various tasks necessary in a complete accounting cycle.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 22 UNITS

BUSAD 310	[1]	Bookkeeping 1	3
BUSAD 320	[2]	Bookkeeping 2	3
BUSAD 200	[2]	Spreadsheet Skills for Financial Accounting	2
BUSAD 203	[3, 4]	Computer Accounting	3
BUSAD 300	[1]	Machine Calculation	2
BUSAD 50	[1]	Business Computations	3
BUSAD 319	[3, 4]	Payroll Accounting	3
BUSAD 336	[3, 4]	Tax Accounting	3

ELECTIVE COURSES - COMPLETE 6 UNITS

OFADM 203	[2]	Intermediate Keyboarding 3	3
OFADM 305	[2]	Records Management	3
BUSAD 210	[3]	Business Communication	3
BUSAD 230	[2]	Personal Finance	3
BUSAD 240	[2]	Principles of Management	3 OR
BUSAD 248	[2]	Introduction to Business	3
BUSAD 377	[2]	Human Relations in Business	3 OR
BUSAD 274	[2]	Human Resources Management	3

TOTAL UNITS IN A.S. MAJOR 28

CERTIFICATE OF ACHIEVEMENT: BOOKKEEPING

The Bookkeeping Certificate is designed for students planning to enter the job market at the entry level as a bookkeeper after completing the required program courses. Student should have keyboarding skills. If not, he/she should take a beginning keyboarding course. Degrees and Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All required courses must be passed with a "C" grade or better. Interested students should consult Business Administration faculty advisors.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment as an entry-level bookkeeper.*
3. *Demonstrate the working knowledge required to perform the various tasks necessary in a complete accounting cycle.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 22 UNITS

BUSAD 310	[1]	Bookkeeping 1	3
BUSAD 320	[2]	Bookkeeping 2	3
BUSAD 200	[2]	Spreadsheet Skills for Financial Accounting	2
BUSAD 203	[2]	Computer Accounting	3
BUSAD 300	[1]	Machine Calculation	2
BUSAD 50	[1]	Business Computations	3
BUSAD 319	[2, 3]	Payroll Accounting	3
BUSAD 336	[1, 2]	Tax Accounting	3

ELECTIVE COURSES - COMPLETE 3 UNITS

OFADM 203	[1]	Intermediate Keyboarding 3	3
OFADM 305	[1]	Records Management	3
BUSAD 210	[1]	Business Communication	3
BUSAD 230	[1]	Personal Finance	3
BUSAD 240	[1]	Principles of Management	3
BUSAD 248	[1]	Introduction to Business	3
BUSAD 274	[1]	Human Resources Management	3
BUSAD 377	[1]	Human Relations in Business	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 25

SKILLS RECOGNITION: **ENTRY-LEVEL BOOKKEEPER**

In the Bookkeeping Program, students learn to analyze and enter transactions in journals, post to ledgers, complete worksheets, prepare the company's payroll, calculate employer payroll taxes, prepare the federal and state payroll tax forms, use various bookkeeping registers, prepare adjusting and closing entries, prepare classified earnings and capital statements, and prepare balance sheets. Students also learn about depreciation, bad debts, cost of goods sold, notes receivable, notes payable, inventory valuation and business taxes. The use of computers is also an important part of the Bookkeeping Program.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Obtain employment as an entry-level bookkeeper*
2. *Demonstrate the working knowledge required to perform the various tasks necessary in a complete accounting cycle.*
3. *Demonstrate a working knowledge of computerized accounting.*

PROGRAM REQUIREMENTS

Skills Recognition Awards are issued to students in recognition of completion of specified requirements, which indicate proficiency. All required courses must be passed with a "C" grade or better. Interested students should consult division advisors.

REQUIRED COURSES: COMPLETE 14 UNITS

BUSAD 300	[1]	Machine Calculation	2
BUSAD 310	[1]	Bookkeeping 1	3
BUSAD 50	[1]	Business Computations	3
BUSAD 203	[2]	Computer Accounting	3
BUSAD 320	[2]	Bookkeeping 2	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 14

Business Administration
PROGRAM
(209) 575-6129

This curriculum plan is intended for those interested in transferring to a four-year college or university. Students seeking transfer to a California State University (CSU) campus should refer to the A.S.-T degree in Business Administration. Students seeking transfer to other colleges or universities should use the A.S. Degree in Business Administration and choose courses which meet the entrance requirements of their intended college of transfer.

Students are encouraged to consult with the Business Administration faculty and a counselor in order to modify the curriculum to reflect their career interests and the career goals of the major. Students who plan to pursue a Business Administration major at a four-year institution should check the catalog of the senior school for specific requirements. Visit www.assist.org for specific transfer information.

The Business Administration Program is designed to prepare students who plan to transfer to a four-year college or university to earn a Bachelor in Arts or Science Degree. Students take classes to complete general education requirements and combine business classes in accounting, economics, marketing, and business law to complete the Business Administration Program. Upon transferring to a four-year college or university, students may choose a concentration in areas such as accounting, business teacher education, executive secretarial administration, finance, insurance, international business, management information, marketing, production operations and systems management, and real estate, and land use affairs.

A.S.-T DEGREE:
BUSINESS ADMINISTRATION

ABOUT THIS PROGRAM

The Associate in Science in Business Administration for Transfer Degree is intended for students who plan to complete a Bachelor's Degree in Business Administration at a California State University campus. This degree includes lower division coursework that is required for transfer and provides students with solid, foundational insight into the complexities of the contemporary business environment. Coursework in the areas of accounting, business law, and economics will equip students to recognize and analyze business, ethical, and financial issues in order to make informed decisions. Students who transfer to a California State University campus will be able to pursue degrees in areas such as accounting, finance, human resources management, international business, management, operations management, and marketing.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Transfer to a CSU college.*
2. *Be academically prepared for upper division coursework.*
3. *Demonstrate the ability to recognize and analyze ethical issues as they apply to the business environment.*
4. *Demonstrate an understanding of business terminology.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN BUSINESS ADMINISTRATION FOR TRANSFER DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education - Breadth Requirements

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

REQUIRED CORE: (18 UNITS)

BUSAD201	[2]	Financial Accounting	4
BUSAD 202	[3]	Managerial Accounting	4
BUSAD 218	[4]	Business Law	4
ECON 101	[1]	Principles of Macroeconomics	3
ECON 102	[2]	Principles of Microeconomics	3

LIST A: COMPLETE 1 COURSE (3-4 UNITS)

MATH 134	[2,3,4]	Elementary Statistics	4
MATH 130	[2,3,4]	Finite Mathematics	3
MATH 138	[2,3,4]	Calculus for Business & Social Sciences	3

LIST B: SELECT TWO COURSES

Any list A course not used above			3-4
CSCI 220	[3]	Business Information Systems	3 OR
CSCI 200	[1]	Technical Computer Literacy	3
BUSAD 248	[1]	Introduction to Business	3 OR
BUSAD 210	[3]	Business Communication	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 27-28

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	9
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	1-3

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for the Associate in Science in Business Administration for Transfer degree. ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.*

A.S. DEGREE: BUSINESS ADMINISTRATION

This curriculum plan is intended for those interested in transferring to a four-year college or university. Students seeking transfer to a California State University (CSU) campus should refer to the A.S.-T Degree in Business Administration. Students seeking transfer to other colleges or universities should use the A.S. Degree in Business Administration and choose courses which meet the entrance requirements of their intended college of transfer. Students are encouraged to consult with the business administration faculty and a counselor in order to modify the curriculum to reflect their career interests and the career goals of the major. Students who plan to pursue a Business Administration major at a four-year institution should check the catalog of the senior school for specific requirements. Visit www.assist.org for specific transfer information.

The Business Administration Program is designed to prepare students who plan to transfer to a four-year college or university to earn a Bachelor in Arts or Science Degree. Students take classes to complete general education requirements and combine business classes in accounting, economics, marketing, and business law to complete the Business Administration Program. Upon transferring to a four-year college or university, students may choose a concentration in areas such as accounting, business teacher education, executive secretarial administration, finance, insurance, international business, management information, marketing, production operations and systems management, and real estate and land use affairs.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Transfer to a 4 year college or university (non CSU).*
2. *Be academically prepared for upper division coursework.*
3. *Demonstrate the ability to recognize and analyze ethical issues as they apply to the business environment.*
4. *Demonstrate an understanding of business terminology.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. This degree is intended for individuals who desire to transfer to a University of California (UC) campus or other four-year college (non California State University campus). Students seeking to transfer to a CSU campus should pursue the Associate in Science Transfer Degree (A.S.-T). Students are advised to consult with a counselor and visit www.assist.org in order to meet specific college or university transfer requirements.

REQUIRED COURSES - COMPLETE 18 UNITS

BUSAD	201	[2]	Financial Accounting 4
BUSAD	202	[3]	Managerial Accounting 4
ECON	101	[1]	Principles of Macroeconomics 3
ECON	102	[2]	Principles of Microeconomics 3
BUSAD	218	[3]	Business Law 4

ELECTIVE COURSES – COMPLETE 9 UNITS

BUSAD	200	[2]	Spreadsheet Skills for Financial Accounting 2
BUSAD	203	[4]	Computer Accounting 3
BUSAD	210	[3]	Business Communication 3
BUSAD	230	[2]	Personal Finance 3
BUSAD	240	[1]	Principles of Management 3
BUSAD	245	[2]	Principles of Marketing 3
BUSAD	248	[1]	Introduction to Business 3
BUSAD	249 A-D	[4]	Business Internship 1-4
BUSAD	274	[4]	Human Resources Management 3
BUSAD	208	[3]	Introduction to International Business 3
CSCI	201	[1]	General Computer Literacy 3

TOTAL UNITS IN A.S. MAJOR 27

Business Operations PROGRAM (209) 575-6129

The Business Operations major is designed for those students seeking an A.S. degree in management and/or marketing activities of organizations. The major offers two separate tracks for those students wishing to specialize in either area.

The Management track in Business Operations will prepare students for careers in both profit and nonprofit organizations. The basic functions of management are applied in organizations of all sizes and types. These functions include planning, organization, directing, and controlling. Students will learn the theory and techniques of problem solving, communication, motivation, and quality performance.

A.S. DEGREE: BUSINESS OPERATIONS: MANAGEMENT

The AS in Business Operations Management will prepare students for careers in both for-profit and nonprofit organizations. The basic functions of management are applied in organizations of all sizes and types. These functions include planning, organization, directing, and controlling. Students will learn the theory and techniques of problem solving, communication, motivation, quality performance, as well as ethical issues faced by managers.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment in an entry-level management position within the for-profit or non-profit sector.*
3. *Critically analyze common management issues.*
4. *Demonstrate appropriate and effective business communication skills.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 20 UNITS

BUSAD 240	[1]	Principles of Management	3
BUSAD 210	[3]	Business Communication	3
BUSAD 201	[2]	Financial Accounting	4
BUSAD 218	[4]	Business Law	4
BUSAD 274	[3]	Human Resources Management	3
CSCI 201	[1]	General Computer Literacy	3

ELECTIVE COURSES - COMPLETE 8-10 UNITS

BUSAD 200	[2]	Spreadsheet Skills for Financial Accounting	2
BUSAD 202	[3]	Managerial Accounting	4
BUSAD 248	[1]	Introduction to Business	3
BUSAD 245	[1]	Principles of Marketing	3
CMPGR 215	[1]	Business Presentation Graphics	3
CSCI 220	[4]	Business Information Systems	3
BUSAD 208	[1, 2]	Introduction to International Business	3
BUSAD 209	[1, 2]	Import/Export Fundamentals	3
BUSAD 364	[1, 2]	Total Quality Management	3

TOTAL UNITS IN A.S. MAJOR 28– 30

Chemical Dependency Counseling PROGRAM (209) 575-6129

A.A. DEGREE: CHEMICAL DEPENDENCY COUNSELING

The Chemical Dependency Counseling program is designed to provide students with the knowledge, professional values, and skillset required to begin the certification process for and work in California Chemical Dependency treatment settings. It also provides opportunities for general knowledge about addiction, and chemical dependency treatment. This program leads to an AA in Chemical Dependency Counseling, and a Certificate of Achievement in Chemical Dependency Counseling which is fully accredited by the California Association of Alcohol and Drug Educators (CAADE) and is available to students who meet the graduate requirements and complete required courses.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate an understanding of chemical dependency, family systems, and the application of the code of ethics as it relates to chemical dependency counseling.*
2. *Exhibit effective, communication, body language, and written abilities.*
3. *Demonstrate an understanding of addiction, biology, psychoactive substances, co-occurring disorders, social problems, and the relation to clinical or group practice with individuals, families, groups, communities, and organizations.*
4. *Comprehend the wide range of chemical dependency counseling options, chronological standpoints, and the populations commonly served.*
5. *Conduct a basic assessment, interview, intervention, referral, individual counseling, and group session with individuals that are chemically dependent.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 36 UNITS

HUMSR 101	[1]	Introduction to Human Services	3
HUMSR 111	[2]	Counseling in Chemical Dependency	3
HUMSR 116	[1]	Drugs and Alcohol in Society	3
HUMSR 117	[3]	Interv/Treatment Strategies in Chemical Dependency	3
HUMSR 118	[3]	Drugs and Human Behavior	3
HUMSR 120	[4]	Professional Development in the Helping Professions	3
HUMSR 144	[3]	Human Services Practicum	1
HUMSR 145ABD*	[NP]	Community Agency Practicum	1-4
HUMSR 110	[NP]	Intro to Interviewing, Counseling	3
HUMSR 113	[NP]	Co-Occurring Disorders	3
HUMSR 119	[NP]	Intro Grp Ldrshp/Grp Process	3
HUMSR 142	[NP]	Introduction to Psychosocial Rehabilitation	3
HUMSR 143	[NP]	Psychosocial Rehabilitation Practice	3

TOTAL UNITS IN A.A. MAJOR 36

**Student must take HUMSR 145A, B, or D to achieve at least 6 units.*

CERTIFICATE OF ACHIEVEMENT: **CHEMICAL DEPENDENCY COUNSELING**

A fully accredited California Association for Drug and Alcohol Educators (CAADE) Certificate of Achievement in Chemical Dependency Counseling will be awarded upon the satisfactory completion of the 36 unit curriculum listed below with a 2.0 GPA or higher in each course.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform clinical evaluations which is the systematic approach to screening and assessment of individuals thought to have a substance use disorder; being considered for admission to addiction-related services, or presenting in a crisis situation.*
2. *Develop treatment plans which is a collaborative process in which professionals and the client develop a written document that identifies important treatment goals; describes measurable, time-sensitive action steps toward achieving those goals with expected outcomes; and reflects a signed agreement between a counselor and client.*
3. *Verbalize referrals which is the process of facilitating the client's use of available support systems, and community resources to meet needs identified in clinical evaluations and treatment plans.*
4. *Demonstrate service coordination which is the administrative, clinical, and evaluative activities that bring the client, treatment services, community agencies, and other resources together to focus on issues and needs identified in the treatment plan.*
5. *Conduct individual and group counseling sessions which is the collaborative process that facilitates client's progress towards mutually determined treatment goals and objectives.*
6. *Provide client, family, and community education which is the process of providing clients, families, significant others, and community groups with information on risks related to psychoactive substance use, as well as available prevention, treatment, and recovery resources.*
7. *Demonstrate appropriate documentation skills which involves the process of screening and intake, assessment, treatment planning, clinical reports, progress notes, discharge summaries, and other client-related data.*
8. *Uphold professional standards and ethical responsibilities which are the obligations of an addiction counselor to adhere accepted ethical and behavioral standards, conduct, and professional development.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in Chemical Dependency Counseling, the student must satisfactory complete the requirements detailed in the California Association for Alcohol and Drug Educators curriculum, which include completion of 36 units.

REQUIRED COURSES - COMPLETE 36 UNITS

HUMSR 101	[NP]	Introduction to Human Services	3
HUMSR 110	[NP]	Intro to Interviewing, Counseling	3
HUMSR 111	[NP]	Counseling in Chemical Dependency	3
HUMSR 113	[NP]	Co-Occurring Disorders	3
HUMSR 116	[NP]	Drugs and Alcohol in Society	3
HUMSR 117	[NP]	Interv/Treatment Strategies in Chemical Dependency	3
HUMSR 118	[NP]	Pharmacology of Abused Substances	1
HUMSR 119	[NP]	Intro Grp Ldrshp/Grp Process	3
HUMSR 120	[NP]	Professional Development in the Helping Professions	3
HUMSR 142	[NP]	Introduction to Psychosocial Rehabilitation	3 OR
HUMSR 143	[NP]	Psychosocial Rehabilitation Practice	3
HUMSR 144	[NP]	Human Services Practicum	1
HUMSR 145ABD*	[NP]	Community Agency Practicum	1-4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 36

**Two completions*

Chemistry
PROGRAM
(209) 575-6173

A.S.-T DEGREE:
CHEMISTRY

The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) is designed to prepare students who wish to transfer to a CSU and major in Chemistry. The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Chemistry. Courses in organic and inorganic chemistry will enable the student to demonstrate ability to engage in critical thinking and problem-solving in the application of Chemistry principles. The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) includes curriculum which focuses on practical application of problem solving skills and theory. Students who complete The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) will be able to demonstrate competence in the application of Chemistry. The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) is intended for students who plan to complete a bachelor's degree in Chemistry at a CSU campus. Students completing the Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Potential careers in the Chemistry field include those of Chemistry educator, Chemical technician and Chemical researcher in both academia and industry.

The Associate in Science in Chemistry for Transfer Degree (AS-T in Chemistry) may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon completion of the Associate in Science in Chemistry for Transfer (AS-T in Chemistry) Degree, students will be able to:

1. *Master content in general and organic chemistry by describing chemical and physical structures, problem solving using mathematical models, and analyzing and describing the nature of chemical reactions and energy.*
2. *Clearly communicate experimental motivations and results through oral and written means*
3. *Use quantitative and/or qualitative analysis techniques to determine an unknown in a general chemistry laboratory setting.*
4. *Use NMR, IR and other spectrum to determine an unknown organic compound.*
5. *Demonstrate professional integrity, safety, and environmental stewardship.*
6. *Formulate meaningful conclusions from experimentally acquired chemical data.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN CHEMISTRY FOR TRANSFER DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

PROGRAM REQUIREMENTS

To earn an Associate in Science in Chemistry for Transfer Degree, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway which include completion of the requirements below.

REQUIRED: COMPLETE 18 UNITS IN CHEMISTRY

CHEM 101	[1]	General Chemistry 1	5 AND
CHEM 102	[2]	General Chemistry 2	5
CHEM 122	[3]	Structure and Reactivity: Organic Chemistry 1	4 AND
CHEM 123	[4]	Structure and Reactivity: Organic Chemistry 2	4

REQUIRED: COMPLETE 8 UNITS IN PHYSICS

PHYS 101	[2]	General Physics: Mechanics	4
PHYS 103	[3]	General Physics: Electricity, Magnetism, & Modern Physics	4

REQUIRED: COMPLETE 8 UNITS IN CALCULUS

MATH 171	[1]	Calculus: First Course	4 AND
MATH 172	[2]	Calculus: Second Course	4

TOTAL UNITS IN A.S.-T MAJOR 34

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED 7
GENERAL EDUCATION (CSU-GE OR IGETC FOR STEM) UNITS 31-33
ELECTIVE (CSU TRANSFERABLE) UNITS 2

TOTAL UNITS REQUIRED FOR A.S.-T. DEGREE 60

**Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

A.S. DEGREE: **CHEMISTRY**

ABOUT THIS EMPHASIS

This A.S. degree is designed as a University Preparation, Emphasis in Chemistry. The University Preparation Degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. Chemistry is the branch of physical science that deals with the elementary substances, or forms of matter, of which all bodies are composed, the laws that regulate the combination of these elements in the formation of compound bodies, and the various phenomena that accompany their exposure to diverse physical conditions. This area of emphasis is recommended for students who wish to continue at a four-year college or university as a chemistry major, premedical or similar major.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Master content in general and organic chemistry by describing chemical and physical structures, problem solving using mathematical models, and analyzing and describing the nature of chemical reactions and energy.*
2. *Clearly communicate experimental motivations and results through oral and written means.*
3. *Use quantitative and/or qualitative analysis techniques to determine an unknown in a general chemistry laboratory setting.*
4. *Use NMR, IR and other spectrum to determine an unknown organic compound.*
5. *Formulate meaningful conclusions from experimentally acquired chemical data*
6. *Demonstrate professional integrity, safety, and environmental stewardship.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. See counselor or advisor for selection of courses.

REQUIRED COURSES – COMPLETE 10 UNITS

CHEM 101	[1]	General Chemistry 1	5
CHEM 102	[2]	General Chemistry 2	5

REQUIRED ORGANIC CHEMISTRY COURSES-COMPLETE 10 UNITS

CHEM 112	[3]	Organic Chemistry 1	5
CHEM 113	[4]	Organic Chemistry 2	5

ELECTIVE COURSES – COMPLETE 8 UNITS

BIO 101	[NP]	Biological Principles	4
BIO 111	[NP]	General Biology	4
MATH 171	[NP]	Calculus: First Course	4
MATH 172	[NP]	Calculus: Second Course	4
MATH 173	[NP]	Calculus: Third Course	4
PHYS 101	[NP]	General Physics: Mechanics	4
PHYS 102	[NP]	General Physics: Waves, Thermodynamics, & Optics	4
PHYS 103	[NP]	General Physics: Electricity, Magnetism, &Modern Physics	4

TOTAL UNITS REQUIRED IN A.S. MAJOR 28

• Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select 2 courses to complete within one subject from the list of electives. Additional courses may be required by your transfer university.

Child Development
PROGRAM
(209)575-6343

The Child Development Program offers both theoretical and practical courses, which focus on the growth and development of all children from conception to late adolescence. Students use this knowledge to create culturally relevant, inclusive, age-appropriate, anti-bias environments that promote optimum care and learning opportunities. Coursework prepares students for a wide variety of careers in direct services for children and support services for families in licensed, state, federal, private and/or non-profit programs serving infants, children, and adolescents. Required coursework in the Child Development Program emphasizes educational ladders leading to certificates, the Associate in Science degree, and transfer to baccalaureate programs.

This coursework is designed to meet the academic requirements of the Child Development Permits, issued by the Commission on Teacher Credentialing (Title 5), the California Department of Social Services (DSS Title 22), and the Early Intervention Certificates developed in conjunction with the California Early Start Community College Personnel Preparation Project in Early Intervention. Students should be advised that for the various levels of the Child Development Permits and Early Intervention Certificates, there is an experience requirement and/or general education requirements. All Child Development courses for certificates, degrees, and permits must be completed with a grade of "C" or better. All required general education requirements for the Child Development Permits and Early Intervention Certificates, both issued by the State, must be completed with a grade of "C" or better. All students are encouraged to consult a Child Development Advisor for enrollment and program details. Advisors will assist students in the selection of proper courses and sequences.

A.S.-T DEGREE:
EARLY CHILDHOOD EDUCATION

The Associate in Science in Early Childhood Education for Transfer (AS-T in Early Childhood Education) Degree includes lower division coursework that is required for transfer and will provide students with the opportunity to learn valuable skills in creating culturally relevant, inclusive, age-appropriate, anti-bias environments and promote optimum care and learning opportunities. The Associate in Science in Early Childhood Education for Transfer (AS-T in Early Childhood Education) includes courses that are both theoretical and practical, including topics such as curriculum development, program planning, and child growth and development from conception through adolescence.

The Associate in Science in Early Childhood Education for Transfer (AS-T in Early Childhood Education) Degree is intended for students who plan to complete a bachelor's degree in Early Childhood Education at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN EARLY CHILDHOOD EDUCATION FOR TRANSFER (AS-T IN EARLY CHILDHOOD EDUCATION) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
- *(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.*
- *(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.*

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.*
2. *Design, implement and evaluate environments and activities through observation, assessment, and intentional reflection that support positive, developmental play and learning outcomes for all young children.*
3. *Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.*
4. *Develop strategies that promote partnerships between programs, teachers, families and their communities.*
5. *Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the Early Care and Education.*

PROGRAM REQUIREMENTS

To earn an Associate in Science for Transfer Degree in this major, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway which include completion of the requirements below.

REQUIRED CORE - COMPLETE 24 UNITS

CLDDV 101	[1]	Principles and Practices of Teaching Young Children	3
CLDDV 103	[1]	Child Growth and Development	3
CLDDV 107	[1]	Introduction to Curriculum	3
CLDDV 109	[1]	Child - Family - Community	3
CLDDV 111	[2]	Health, Safety, and Nutrition	3
CLDDV 167	[2]	Observation and Assessment	3
CLDDV 262	[2]	Diversity in Educational Settings	3
CLDDV 128	[3]	Preschool Practicum	3 OR
CLDDV 127	[3]	Infant/Toddler Practicum	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 24

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	3-6
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	2-3

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE..... 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

A.S. DEGREE: CHILD DEVELOPMENT

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eighth as related to high quality care and education of young children.*
2. *Design, implement and evaluate environments and activities through observation, assessment, and intentional reflection that support positive, developmental play and learning outcomes for all young children.*
3. *Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.*
4. *Develop strategies that promote partnerships between programs, teachers, families and their communities.*
5. *Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the Early Care and Education profession.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 33 UNITS

CLDDV 101	[1]	Principles and Practices of Teaching Young Children	3
CLDDV 103	[1]	Child Growth and Development	3
CLDDV 107	[1]	Introduction to Curriculum	3
CLDDV 109	[1]	Child-Family-Community	3
CLDDV 111	[2]	Health, Safety, and Nutrition	3
CLDDV 121	[2]	Guidance of Young Children	3
CLDDV 125	[2]	Infant and Toddler Development and Care	3
CLDDV 127	[3]	Infant/Toddler Practicum	3 OR
CLDDV 128	[3]	Preschool Practicum	3
CLDDV 163	[4]	Curriculum and Strategies for Children with Special Needs	3
CLDDV 167	[4]	Observation and Assessment	3
CLDDV 262	[4]	Diversity in Educational Settings	3

TOTAL UNITS IN A.S. MAJOR 33

CERTIFICATE OF ACHIEVEMENT: ASSOCIATE TEACHER

The Certificate of Achievement in Associate Teacher acts as a pathway to various career opportunities in education, State of California permits, Early Intervention Assistant Personnel Competencies for California's Early Start Program, A.A./A.S. degrees, and transfer to a university.

Teachers and administrators of funded child development programs in the State of California must hold permits issued by the California Commission on Teacher Credentialing. All certificates align with the permits issued by the State of California, Commission on Teacher Credentialing.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Design, implement and evaluate environments and activities through observation, assessment, and intentional reflection that support positive, developmental play and learning outcomes for all young children.*
2. *Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a C or better.

REQUIRED COURSES - COMPLETE 12 UNITS

CLDDV 101	[1]	Principles and Practices of Teaching Young Children	3
CLDDV 103	[1]	Child Growth and Development	3
CLDDV 107	[2]	Introduction to Curriculum	3
CLDDV 109	[2]	Child-Family-Community	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 12

CERTIFICATE OF ACHIEVEMENT: EARLY INTERVENTIONIST

The Certificate of Achievement in Early Interventionist acts as a pathway to various career opportunities in education, State of California permits, Early Intervention Assistant Personnel Competencies for California's Early Start Program, A.A./A.S. degrees, and transfer to a university.

Teachers and administrators of funded child development programs in the State of California must hold permits issued by the California Commission on Teacher Credentialing. All certificates align with the permits issued by the State of California, Commission on Teacher Credentialing. To earn a Certificate of Achievement, the student must complete the coursework as indicated. Each course must be completed with a grade of C or better.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Integrate understanding of the special needs, characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.*
2. *Design, implement and evaluate environments and activities through observation, assessment, and intentional reflection that support positive, developmental play and learning outcomes for young children in inclusive environments.*
3. *Adapt and apply respectful, effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a C or better.

REQUIRED COURSES - COMPLETE 24 UNITS

CLDDV 103	[NP]	Child Growth and Development	3
CLDDV 109	[NP]	Child-Family-Community	3
CLDDV 121	[NP]	Guidance of Young Children	3
CLDDV 125	[NP]	Infant and Toddler Development and Care	3
CLDDV 127	[3]	Infant/Toddler Practicum	3 OR
CLDDV 128	[3]	Preschool Practicum	3
CLDDV 160	[NP]	Introduction to Children with Special Needs	3
CLDDV 163	[NP]	Curriculum and Strategies for Children with Special Needs	3
CLDDV 167	[3]	Observation and Assessment	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 24

CERTIFICATE OF ACHIEVEMENT: **MASTER TEACHER**

The Certificate of Achievement in Master Teacher acts as a pathway to various career opportunities in education, State of California permits, Early Intervention Assistant Personnel Competencies for California's Early Start Program, A.A./A.S. degrees, and transfer to a university.

Teachers and administrators of funded child development programs in the State of California must hold permits issued by the California Commission on Teacher Credentialing. All certificates align with the permits issued by the State of California, Commission on Teacher Credentialing. To earn a Certificate of Achievement, the student must complete the coursework as indicated. Each course must be completed with a grade of C or better.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and describe the courses totaling 32 units necessary to complete this certificate and compare/contrast how the certificate is aligned with the Master Teacher permit issued through State of California, Commission on Teacher Credentialing.*
2. *Apply specialized knowledge of courses from the six-unit option in the early care and education classroom (i.e. infant/toddler; early intervention; families and culture.)*
3. *Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence as the lead teacher in the classroom.*
4. *Demonstrate an awareness and understanding of the diverse cultural aspects of child rearing and family practices and potential cultural conflicts as individuals interact.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a C or better.

REQUIRED COURSES - COMPLETE A MINIMUM OF 17 UNITS

CLDDV 101	[1]	Principles and Practices of Teaching Young Children	3
CLDDV 103	[1]	Child Growth and Development	3
CLDDV 107	[1]	Introduction to Curriculum	3
CLDDV 109	[1]	Child-Family-Community.	3
CLDDV 127	[3]	Infant/Toddler Practicum	3 OR
CLDDV 128	[3]	Preschool Practicum	3
CLDDV 154	[3]	Adult Relationships & Mentoring in School	2

SELECT ONE 6-UNIT SPECIALIZATION OPTION FROM THE FOLLOWING:

CHOOSE ONE OF THE FOLLOWING OPTIONS:

EARLY INTERVENTION OPTION - COMPLETE 6 UNITS

CLDDV 163	[NP]	Curriculum and Strategies for Children with Special Needs	3
CLDDV 167	[NP]	Observation and Assessment	3 OR
CLDDV 160	[NP]	Introduction to Children with Special Needs	3

INFANT/TODDLER OPTION - COMPLETE 6 UNITS

CLDDV 125	[NP]	Infant and Toddler Development and Care	3
CLDDV 127	[NP]	Infant/Toddler Practicum	3
CLDDV 122	[NP]	Programs and Environments for Infants and Toddlers	3

ELECTIVES - COMPLETE 9 UNITS

CLDDV 111	[2]	Health, Safety, and Nutrition	3
CLDDV 121	[2]	Guidance of Young Children	3
CLDDV 125	[2]	Infant and Toddler Development and Care	3
CLDDV 163	[4]	Curriculum and Strategies for Children with Special Needs	3
CLDDV 167	[4]	Observation and Assessment	3
CLDDV 262	[4]	Diversity in Educational Settings	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 32

** NOTE: Students completing the required Child Development coursework for an A.S. degree, and who have completed CLDDV 154, will be qualified at the Master Teacher Certificate level with a specialization in Early Intervention. In addition students completing the required Child Development coursework for an A.S. degree , and who have completed CLDDV 154, including the Infant/Toddler or Inclusion lab practicum will be qualified at the Master Teacher Certificate level with a specialization in Infant/Toddler Development. Students should consult with a child development department advisor for specific information about specializations and the Master Teacher Permit.*

CERTIFICATE OF ACHIEVEMENT: **SITE SUPERVISOR**

The Certificate of Achievement in Site Supervisor acts as a pathway to various career opportunities in education, State of California permits, Early Intervention Assistant Personnel Competencies for California's Early Start Program, A.A./A.S. degrees, and transfer to a university.

Teachers and administrators of funded child development programs in the State of California must hold permits issued by the California Commission on Teacher Credentialing. All certificates align with the permits issued by the State of California, Commission on Teacher Credentialing. To earn a Certificate of Achievement, the student must complete the coursework as indicated. Each course must be completed with a grade of C or better.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the field of early care and education.*
2. *Integrate understanding of the needs, characteristics and multiple influences on development of children birth to age eight as related to delivering high quality care and education for young children.*
3. *Design, implement and evaluate environments and activities through observation, assessment, and intentional reflection that support positive, developmental play and learning outcomes for all young children.*
4. *Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.*
5. *Develop strategies that promote partnerships between programs, teachers, families and their communities in early care and education settings.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 23 UNITS

CLDDV 101	[1]	Principles and Practices of Teaching Young Children	3
CLDDV 103	[1]	Child Growth and Development	3
CLDDV 107	[2]	Introduction to Curriculum	3
CLDDV 109	[2]	Child-Family-Community	3
CLDDV 127	[2]	Infant/Toddler Practicum	3 OR
CLDDV 128	[2]	Preschool Practicum	3
CLDDV 150	[3]	Administration in Children's Programs	3
CLDDV 151	[4]	Supervision In Children's Programs	3
CLDDV 154	[3]	Adult Relationships & Mentoring in School	2

ELECTIVE COURSES - COMPLETE 9 UNITS

CLDDV 111	[NP]	Health, Safety, and Nutrition	3
CLDDV 121	[NP]	Guidance of Young Children	3
CLDDV 125	[NP]	Infant and Toddler Development and Care	3
CLDDV 160	[NP]	Introduction to Children with Special Needs	3
CLDDV 163	[NP]	Curriculum and Strategies for Children with Special Needs	3
CLDDV 167	[NP]	Observation and Assessment	3
CLDDV 262	[NP]	Diversity in Educational Settings	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 32

CERTIFICATE OF ACHIEVEMENT: **TEACHER**

The Certificate of Achievement in Teacher acts as a pathway to various career opportunities in education, State of California permits, Early Intervention Assistant Personnel Competencies for California's Early Start Program, A.A./A.S. degrees, and transfer to a university.

Teachers and administrators of funded child development programs in the State of California must hold permits issued by the California Commission on Teacher Credentialing. All certificates align with the permits issued by the State of California, Commission on Teacher Credentialing. To earn a Certificate of Achievement, the student must complete the coursework as indicated. Each course must be completed with a grade of C or better.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Integrate understanding of the needs, the characteristics and multiple influences on development of children birth to age eight as related to high quality care and education of young children.*
2. *Design, implement and evaluate environments and activities through observation, assessment, and intentional reflection that support positive, developmental play and learning outcomes for all young children.*
3. *Apply effective guidance and interaction strategies that support all children's social learning, identity and self-confidence.*
4. *Develop strategies that promote partnerships between programs, teachers, families and their communities.*
5. *Apply ethical standards and professional behaviors that demonstrate understanding and knowledge, deepening the commitment to the Early Care and Education.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 18 UNITS

CLDDV 101	[1]	Principles and Practices of Teaching Young Children	3
CLDDV 103	[1]	Child Growth and Development	3
CLDDV 107	[2]	Introduction to Curriculum	3
CLDDV 109	[2]	Child-Family-Community	3
CLDDV 121	[3]	Guidance of Young Children	3
CLDDV 127	[3]	Infant/Toddler Practicum	3 OR
CLDDV 128	[3]	Preschool Practicum	3

ELECTIVE COURSES - COMPLETE 6 UNITS

CLDDV 111	[4]	Health, Safety, and Nutrition	3
CLDDV 125	[4]	Infant and Toddler Development and Care	3
CLDDV 163	[4]	Curriculum and Strategies for Children with Special Needs.	3
CLDDV 167	[4]	Observation and Assessment	3
CLDDV 262	[4]	Diversity in Educational Settings	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 24

Communication Studies
PROGRAM
(209) 575-6081

The Communication Studies Program at Modesto Junior College offers students a variety of courses which incorporate both theory and performance instruction. These include public speaking, argumentation and debate, organizational communication, intercultural and interpersonal communication, contest speaking and forensics competition which includes debate and individual events. The MJC Forensics Team has captured a number of state and national championships. Most courses are available to students in both day and evening hours.

A.A.-T DEGREE:
COMMUNICATION STUDIES

The Associate in Arts in Communication Studies for Transfer Degree includes curriculum which focuses on practical application of communication skills and communication theory. Students who complete the degree will be able to demonstrate communication competence in both personal and business relationships. The Associate in Arts in Communication Studies for Transfer is intended for students who plan to complete a bachelor's degree in Communication Studies at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements. In order to earn this A.A.-T degree, students must complete a minimum of 60 required semester units of CSU transferable coursework with a minimum GPA of 2.0.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Construct speeches and other compositions demonstrating clarity of ideas, research skills, proper source citation, logical argument, awareness of audience, and proper outlining techniques.*
2. *Identify and apply principles of interpersonal communication theory to build functional relationships.*
3. *Demonstrate critical thinking in the analysis and production of communication.*
4. *Adequately debate others, present platform speeches, or perform works of literature in a classroom or outside venue.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN COMMUNICATION STUDIES FOR TRANSFER (AA-T IN COMMUNICATION STUDIES) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0."

ADTs also require that students must earn a C or better in all courses required for the major or area of emphasis. A "P" (Pass) grade is not an acceptable grade for courses in the major.

PROGRAM REQUIREMENTS

To earn an Associate in Arts for Transfer Degree in this major, the student must complete the requirements detailed in the Associate Degree for Transfer pathway. All courses must be completed with a C or better.

REQUIRED CORE - COMPLETE 3 UNITS

COMM 100	[1]	Fundamentals of Public Speaking	3

LIST A (SELECT TWO) - COMPLETE 6 UNITS

COMM 104	[3]	Argumentation	3 OR
COMM 107	[3]	Introduction to Debate	3
COMM 103	[2]	Interpersonal Communication	3
COMM 106	[4]	Group & Organizational Communication	3

LIST B (SELECT TWO) - COMPLETE 6 UNITS

Any List A course not used above.			3
COMM 105 ^	[NP]	Intercollegiate Forensics	3
COMM 130	[3]	Intercultural Communication	3
COMM 132	[NP]	Introduction to Mass Communication	3
COMM 120	[2]	Oral Interpretation	3
COMM 110	[2]	Persuasion	3

Note: ^ Up to 3 units in Forensics may be counted for list B

LIST C (SELECT ONE) - COMPLETE 3 UNITS

Any List A or List B course not used above			3
COMM 102	[1]	Introduction to Human Communication	3
COMM 122	[3]	Introduction to Readers' Theatre	3
COMM 123	[NP]	Storytelling	3
COMM 124	[4]	Advanced Readers' Theatre	3
COMM 133	[2]	Mediated Communication	3

TOTAL UNITS FOR THE A.A.T. MAJOR 18

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6-18
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	11-21

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

A.A. DEGREE: **COMMUNICATION STUDIES**

The Communication Studies Program at Modesto Junior College offers students a variety of courses which incorporate both theory and performance instruction. These include public speaking, argumentation and debate, organizational communication, intercultural and interpersonal communication, contest speaking and forensics competition which includes debate and individual events. The MJC Forensics Team has captured a number of state and national championships. Most courses are available to students in both day and evening hours.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Construct speeches and other compositions demonstrating clarity of ideas, research skills, proper source citation, logical argument, awareness of audience, and proper outlining techniques.*
2. *Identify and apply principles of interpersonal communication theory to build functional relationships.*
3. *Demonstrate critical thinking in the analysis and production of communication.*
4. *Adequately debate others, present platform speeches, or perform works of literature in a classroom or outside venue.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. Student should consult with a Speech Communication advisor for selection of elective units.

REQUIRED COURSES - COMPLETE 6 UNITS

COMM 100	[1]	Fundamentals of Public Speaking	3 OR
COMM 102	[1]	Introduction to Human Communication	3
COMM 104	[NP]	Argumentation	3 OR
COMM 107	[1]	Introduction to Debate	3

ELECTIVE COURSES - COMPLETE 15 UNITS

COMM 103	[2,3,4]	Interpersonal Communication	3
COMM 105	[NP]	Intercollegiate Forensics	3
COMM 106	[3,4]	Group & Organizational Communication	3
COMM 110	[NP]	Persuasion	3
COMM 120	[NP]	Oral Interpretation	3
COMM 122	[NP]	Introduction to Readers' Theatre	3
COMM 123	[NP]	Storytelling	3
COMM 124	[2,3,4]	Advanced Readers' Theatre	3
COMM 130	[2,3,4]	Intercultural Communication	3
COMM 132	[NP]	Introduction to Mass Communication	3
COMM 133	[2,3,4]	Mediated Communication	3

TOTAL UNITS IN A.A. MAJOR 21

CERTIFICATE OF ACHIEVEMENT: **COMMUNICATION STUDIES**

The Certificate of Achievement in Communication Studies is designed to enhance a student's ability to communicate in academic and professional settings. This certificate is intended to improve the communication skills of students from all majors and career plans. Students majoring in fields that require strong communication skills may use certification in Communication Studies as an alternative to completing a Communication Studies degree.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Construct speeches and other compositions demonstrating clarity of ideas, research skills, proper source citation, logical argument, awareness of audience, and proper outlining techniques.*
2. *Identify and apply principles of interpersonal communication theory to build functional relationships.*
3. *Demonstrate critical thinking in the analysis and production of communication.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better or "P" (Pass).

ORAL COMMUNICATION AREA - COMPLETE 3 UNITS

COMM 100	[1]	Fundamentals of Public Speaking	3
COMM 102	[1]	Introduction to Human Communication	3
COMM 110	[1]	Persuasion	3

CRITICAL THINKING AREA- COMPLETE 3 UNITS

COMM 104	[3]	Argumentation	3
COMM 107	[3]	Introduction to Debate	3

PROFESSIONAL SKILLS AREA- COMPLETE 3 UNITS

COMM 103	[2]	Interpersonal Communication	3
COMM 130	[2]	Intercultural Communication	3

GROUP AND ORGANIZATIONAL COMMUNICATION AREA- COMPLETE 3 UNITS

COMM 106	[4]	Group & Organizational Communication	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 12

Computer Applications Specialist PROGRAM
(209) 575-6129

Computer Electronics PROGRAM
(209) 575-6129

CERTIFICATE OF ACHIEVEMENT: COMPUTER APPLICATIONS SPECIALIST

This award is designed for students who will work in a small business performing general computer application procedures such as: document preparation, simple calculations using electronic spreadsheets, or simple database management.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply basic computer hardware, software and information technology concepts and techniques to a variety of business environments.*
2. *Demonstrate proficiency in applying common business productivity software to business functions, including word processing, spreadsheets, database, and presentation applications.*
3. *Identify software to be used to address specific business needs.*
4. *Demonstrate professional and effective communication skills.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 18 UNITS

CSCI 201	[1]	General Computer Literacy	3
CSCI 220	[2]	Business Information Systems	3
CSCI 200	[1]	Technical Computer Literacy	3
CMPGR 263	[1]	Internet Literacy	3
CSCI 223	[2]	Spreadsheet Software	3
CSCI 230	[2]	Database Management Systems	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 18

A.S. DEGREE: COMPUTER ELECTRONICS

The Computer Electronics Program provides training in electronics fundamentals as well as in-depth study of operating systems, computer hardware, wired and wireless networks, and servers. Students train for industry-standard certification examinations (A+, Network+, Security+, and Server+) and prepare for careers as computer and networking service technicians.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Work successfully with Industrial and Information Computer Technology applications within multiple industries.*
2. *Perform basic computer hardware and telecommunication installations and repairs in accordance with industry commonly accepted practices.*
3. *Comply with degree related institutional GELO's.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 13 UNITS

ELTEC 300	[1]	Survey of Applied Technologies	3
CMPET 206	[1, 2, 3]	Personal Computer Assembly, Upgrading & Repairing	3
CMPET 210	[3,4]	Intermediate PC Servicing w/ A+ Certification Training	3
CMPET 214	[3,4]	Microprocessor Programming & Interfacing	3
CMPET 269	[3,4]	Networking Devices & Systems	1

INDUSTRIAL APPLICATION AREA - COMPLETE 6 UNITS

ELTEC 212	[1, 2, 3]	Digital Principles and Circuits	3
ELTEC 232	[3, 4]	Introduction to Programmable Logic Controllers	3
ELTEC 234	[3, 4]	Introduction to PACs: Programmable Automation Controllers	3
MACH 206	[2, 3]	CNC Lathe Programming	3
MACH 207	[2, 3]	CNC Mill Programming	3
MACH 208	[3, 4]	Computer Aided Manufacturing	2

COMPUTER PROGRAMMING AREA - COMPLETE 6 UNITS

CSCI 270	[1, 2]	Introduction to Programming	3
CSCI 221	[2, 3, 4]	Programming With Visual BASIC	3
CSCI 271	[2, 3, 4]	Problem Solving and Programming 1	3
CSCI 273	[2, 3, 4]	Assembly Language Programming	3

NETWORKING AREA - COMPLETE 6 UNITS

CSCI 240	[1, 2]	Networking Essentials	4
ELTEC 208	[1, 2]	Fundamentals of Electricity and Electronics	3
CSCI 210	[3, 4]	Introduction to UNIX/Linux System and Programming	3
CSCI 213	[3, 4]	Windows Server OS	3

TOTAL UNITS IN A.S. MAJOR 31

CERTIFICATE OF ACHIEVEMENT: **COMPUTER ELECTRONICS**

The Computer Electronics Program provides training in electronics fundamentals as well as in-depth study of operating systems, computer hardware, wired and wireless networks, and servers. Students train for industry-standard certification examinations (A+, Network+, Security+, and Server+) and prepare for careers as computer and networking service technicians.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Work successfully with Industrial and Information Computer Technology applications in multiple industries.*
2. *Perform basic computer hardware, telecommunication and industrial installation and repairs in accordance with industry commonly accepted practices.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the coursework below. All required courses must be completed with a C or better.

REQUIRED COURSES - COMPLETE 13 UNITS

ELTEC 300	[1,2]	Survey of Applied Technologies	3
CMPET 206	[1, 2, 3]	Personal Computer Assembly, Upgrading & Repairing	3
CMPET 210	[3, 4]	Intermediate PC Servicing w/ A+ Certification Training	3
CMPET 214	[3, 4]	Microprocessor Programming & Interfacing	3
CMPET 269	[3, 4]	Networking Devices & Systems	1

INDUSTRIAL APPLICATION AREA - COMPLETE 6 UNITS

ELTEC 212	[2, 3]	Digital Principles and Circuits	3
ELTEC 232	[2, 3]	Introduction to Programmable Logic Controllers	3
ELTEC 234	[3, 4]	Introduction to PACs: Programmable Automation Controllers	3
MACH 206	[2, 3]	CNC Lathe Programming	3
MACH 207	[2, 3]	CNC Mill Programming	3
MACH 208	[3, 4]	Computer Aided Manufacturing	2

COMPUTER PROGRAMMING AREA - COMPLETE 6 UNITS

CSCI 270	[1, 2]	Introduction to Programming	3
CSCI 221	[3, 4]	Programming With Visual BASIC	3
CSCI 271	[3, 4]	Problem Solving and Programming 1	3
CSCI 273	[3, 4]	Assembly Language Programming	3

NETWORKING AREA - COMPLETE 6 UNITS

CSCI 240	[1, 2]	Networking Essentials	4
ELTEC 208	[1, 2]	Fundamentals of Electricity and Electronics	3
CSCI 210	[3, 4]	Introduction to UNIX/Linux System and Programming	3
CSCI 213	[3, 4]	Windows Server OS	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 31

Computer Graphics Applications PROGRAM
(209) 575-6129

A.S. DEGREE: **COMPUTER GRAPHICS APPLICATIONS**

The Computer Graphics Applications Associate Degree and Certificate program is structured to enable students to pursue a course of study and computer experience in career areas that rely on computer graphics applications. This program is designed to prepare students for employment, transfer to four year institutions, or to allow employees within these industries to upgrade their skills.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Proficiently operate software, hardware, and equipment according to industry standards.*
2. *Design and develop products and procedures for digital imaging, design, animation, and current and emerging technologies.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 19 UNITS

ART 120	[1]	Basic Drawing 1	3
ART 124	[2]	Color and 2-D Foundation Design	3
CMPGR 202	[1]	Introduction to Computer Graphics	3
CMPGR 213	[3]	Applied Computer Graphics	3
CMPGR 215	[3]	Business Presentation Graphics	3
CMPGR 235	[NP]	Beginning Photoshop	3
CMPGR 219	[4]	Computer Graphics Portfolio Review	1

CHOOSE ONE OF THE FOLLOWING AREAS AND COMPLETE 9 UNITS

DIGITAL DESIGN- COMPLETE 9 UNITS

CMPGR 217	[NP]	Computer Illustration Software	3
CMPGR 252	[NP]	Desktop Publishing for Computer Graphics	3
CMPGR 236	[NP]	Advanced Photoshop	3

WEB DESIGN- COMPLETE 9 UNITS

CMPGR 263	[NP]	Internet Literacy	3
CMPGR 267	[NP]	Dreamweaver in Website Design	3
CMPGR 266	[NP]	Interactive Media Design and Development	3

ANIMATION AND 3-D- COMPLETE 9 UNITS

CMPGR 225	[2]	3D Graphics and Animation	3
CMPGR 226	[3]	3D Graphics and Animation 2	3
CMPGR 284	[3]	Beginning After Effects	3

TOTAL UNITS IN A.S. MAJOR 28

CERTIFICATE OF ACHIEVEMENT:
COMPUTER GRAPHICS APPLICATIONS

The Computer Graphics Applications Associate Degree and Certificate program is structured to enable students to pursue a course of study and computer experience in career areas that rely on computer graphics applications. This program is designed to prepare students for employment, transfer to four year institutions, or to allow employees within these industries to upgrade their skills.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Design and develop products and procedures for digital imaging, design, animation, and current and emerging technologies.*
2. *Proficiently operate software, hardware, and equipment according to industry standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 15 UNITS

ART 124	[2]	Color and 2-D Foundation Design	3
CMPGR 202	[1]	Introduction to Computer Graphics	3
CMPGR 217	[2]	Computer Illustration Software	3
CMPGR 235	[2]	Beginning Photoshop	3
CMPGR 252	[NP]	Desktop Publishing for Computer Graphics	3

ELECTIVE COURSES - COMPLETE 6 UNITS

ART 120	[NP]	Basic Drawing 1	3
CMPGR 213	[NP]	Applied Computer Graphics	3
CMPGR 215	[NP]	Business Presentation Graphics	3
CMPGR 225	[NP]	3D Graphics and Animation	3
CMPGR 236	[NP]	Advanced Photoshop	3
CMPGR 266	[NP]	Interactive Media Design and Development	3
CMPGR 267	[NP]	Dreamweaver in Website Design	3
CMPGR 284	[NP]	Beginning After Effects	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 21

Computer Information Systems PROGRAM
(209) 575-6129

A.S. DEGREE:
COMPUTER INFORMATION SYSTEMS

The Computer Information Systems Program is designed for students who plan to specialize in business computer applications at a four-year college. Students who wish to declare this transfer major should ask for program planning assistance from a business program advisor. Transfer institutions vary in lower division (first two years of college) major department requirements. Meeting the Modesto Junior College Associate Degree major requirements does not necessarily mean a given transfer institution's major requirements have been met.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate preparedness to successfully continue studies in computer information systems at an upper division level.*
2. *Demonstrate the techniques of information analysis and application design and implementation for information technology industries.*
3. *Demonstrate a high level of data organization techniques for information storage and retrieval processes.*
4. *Use these techniques to model real-world applications.*
5. *Demonstrate a high level of communication skills.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below. Students are urged to meet with a Computer Science faculty advisor to assist them plan their specific program for graduation.

REQUIRED COURSES - COMPLETE 21 UNITS

CSCI 220	[1]	Business Information Systems	3
BUSAD 201	[1]	Financial Accounting	4
BUSAD 202	[2]	Managerial Accounting	4
BUSAD 218	[4]	Business Law	4
CSCI 230	[2]	Database Management Systems	3
CSCI 232	[4]	Database Server Administration	3

TOTAL UNITS IN A.S. MAJOR 21

Computer Network Administration PROGRAM
(209) 575-6129

CERTIFICATE OF ACHIEVEMENT: COMPUTER NETWORK ADMINISTRATION

This certificate is designed for students seeking entry-level job positions in computer network administration, designing networks, installing server and client operating systems, configuring network services, and implementing network security. Note: All of these courses are also preparation for Microsoft certification as a Microsoft Certified Professional (MCP) in the individual subject. A student who has completed the Network Administration Certificate would be eligible to complete the Microsoft Certified Systems Engineer (MCSE) certification with the completion of just one additional course from the options list.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate a firm understanding and working knowledge of basic network topologies, client and server operating system configuration, network security principals, and directory services.*
2. *Be prepared to obtain employment in an entry-level position assisting in network design and implementation.*
3. *Design, implement and document a client/server network complete with security policy and a disaster recovery plan for a small-business network.*
4. *Demonstrate professional and effective communication skills.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 15 UNITS

CSCI 210	[1]	Introduction to UNIX/Linux System and Programming	3
CSCI 232	[4]	Database Server Administration	3
CSCI 213	[2]	Windows Server OS	3
CSCI 241	[2]	Advanced Networking & Security	3
CSCI 242	[2]	Directory Services	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 15

CERTIFICATE OF ACHIEVEMENT: COMPUTER NETWORK TECHNICIAN

This certificate is designed for students seeking entry-level job positions in computer network administration, designing networks, installing server and client operating systems, configuring network services, and implementing network security. Note: All of these courses are also preparation for Microsoft certification as a Microsoft Certified Professional (MCP) in the individual subject. A student who has completed the Network Administration Certificate would be eligible to complete the Microsoft Certified Systems Engineer (MCSE) certification with the completion of just one additional course from the options list.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate a firm understanding and working knowledge of basic network troubleshooting techniques.*
2. *Be prepared to obtain employment in an entry-level position as a network technician and help-desk support tech.*
3. *Install, configure, upgrade and maintain personal computer hardware and operating systems.*
4. *Install, configure, and troubleshoot basic networking hardware and protocols.*
5. *Provide support for users of operating systems, applications and computer information systems.*
6. *Demonstrate professional and effective communication skills.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 13 UNITS

CSCI 201	[1]	General Computer Literacy	3
CMPET 206	[1]	Personal Computer Assembly, Upgrading & Repairing	3
CMPET 210	[2]	Intermediate PC Servicing w/A+ Training	3
CSCI 240	[2]	Networking Essentials	4

ELECTIVE COURSES - COMPLETE 3 UNITS

CSCI 210	[2]	Introduction to UNIX/Linux System and Programming	3
ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 16

Computer Programming Specialist PROGRAM
(209) 575-6129

CERTIFICATE OF ACHIEVEMENT:
COMPUTER PROGRAMMING SPECIALIST

This Certificate of Achievement will prepare students to work as an entry level programmer in the areas of JAVA programming, C++ programming, or Visual BASIC programming.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate a firm understanding and working knowledge of basic problem analysis, design, implementation, and maintenance.*
2. *Be prepared to obtain employment in an entry-level position in software engineering.*
3. *Employ industry-accepted coding practices and standards.*
4. *Implement object oriented software solutions.*
5. *Employ various code level debugging techniques.*
6. *Utilize software development tools.*
7. *Perform functional software testing.*
8. *Demonstrate professional and effective communication skills.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 12 UNITS

CSCI 270	[1]	Introduction to Programming	3
CSCI 271	[2]	Problem Solving and Programming 1	3
CSCI 210	[2]	Introduction to UNIX/Linux System and Programming	3
CSCI 221	[2]	Programming With Visual BASIC	3

ELECTIVE COURSES – COMPLETE 3-4 UNITS

CSCI 222	[3]	Advanced Visual BASIC	3
CSCI 252	[2]	Script Programming for the Web	3
CSCI 272	[3]	Problem Solving and Programming 2	3
CSCI 274	[3]	Windows Programming With Visual Studio	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 15-16

Computer Science
PROGRAM
(209) 575-6129

A.S.-T. DEGREE:
COMPUTER SCIENCE

This program is designed to prepare students who wish to transfer to a CSU and major in Computer Science. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Computer Science. Courses such as programming, discrete structures, computer architecture and organization will enable the student to demonstrate ability to engage in critical thinking and problem-solving in the application of computer science principles. The Associate in Science in Computer Science for Transfer Degree includes curriculum which focuses on practical application of problem solving skills and theory.

Students who complete the degree will be able to demonstrate competence in the application of computer science. The Associate in Science in Computer Science for Transfer is intended for students who plan to complete a bachelor's degree in Computer Science at a CSU campus.

Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. Potential careers in the Computer Science field include Computer Programmers, Computer Science Teachers, Software and Web Developers, and Computer and Information Systems Managers.

This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM REQUIREMENTS

To receive an Associate of Science for Transfer Degree in Computer Science, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN COMPUTER SCIENCE FOR TRANSFER (AS-T IN COMPUTER SCIENCE) DEGREE:

1. *Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
   - *(A) The California State University-General Education-Breadth pattern (CSU GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.*
   - *(B) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.*
2. *Obtainment of a minimum grade point average of 2.0.*

**All courses within the ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.*

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe the organizational structure of computer hardware and its connection to computer software.*
2. *Describe how formal tools of symbolic logic and discrete structures are used to model real-life situations and relate the ideas of computational induction to recursion and recursively defined structures.*
3. *Design, implement, test, and debug algorithms to solve a variety of problems.*
4. *Design, implement, test, and debug computer programs using fundamental constructs and a variety of data structures.*
5. *Apply structured and object-oriented approaches to the design and implementation of computer programs.*

REQUIRED CORE

CSCI 204	[NP]	Discrete Structures for Computer Science	3
CSCI 271	[NP]	Problem Solving and Programming 1	3
CSCI 272	[NP]	Problem Solving and Programming 2	3
CSCI 273	[NP]	Assembly Language Programming	3
MATH 171	[NP]	Calculus: First Course	4 AND
MATH 172	[NP]	Calculus: Second Course	4
PHYS 101	[NP]	General Physics: Mechanics	4
PHYS 103	[NP]	General Physics: Electricity, Magnetism, & Modern Physics	4

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 28

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	7
GENERAL EDUCATION (CSU-GE or IGETC) UNITS.	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	2

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

A.S. DEGREE: COMPUTER SCIENCE

The Computer Science A.S. Degree Program at Modesto Junior College is designed to meet the needs of non-transfer students who wish to acquire the new computer skills needed in today's work environment. The Computer Science Program provides students with a general knowledge of computer literacy and information systems, microcomputer hardware and software systems, the ability to work with a wide variety of applications software, and an opportunity to develop programming and problem-solving skills. Students who wish to major in Computer Science and transfer to a four-year institution should ask for program planning assistance from a business program advisor. Modesto Junior College offers a Computer Science transfer major to meet the major requirement for the associate degree. Transfer institutions vary in lower division (first two years of college) major department requirements. Meeting the Modesto Junior College Associate Degree major requirements does not necessarily mean the transfer institution's major requirements have been met. Consult a Computer Science faculty advisor for assistance in determining the appropriate courses for the major you select.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate preparedness to successfully enter local industry as a programming specialist, network specialist, or information systems specialist depending on degree option completed.*
2. *Plan, design, and implement solutions using standard computing problem solving techniques.*
3. *Configure and utilize computer hardware and software to solve most entry level business application requirements.*
4. *Make informed assessments of software implementations with regards to quality and effectiveness.*
5. *Assist and provide training to employees in local area businesses.*
6. *Demonstrate a high level of communication skills.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below. Students are urged to meet with a Computer Science faculty advisor to assist them plan their specific program for graduation.

**IMPORTANT: This program is intended to be a Transfer Program guide only. Associate Degree Requirements, general education patterns, and junior standing requirements are subject to change. It is the student's responsibility to consult the catalog for the targeted college/university. Students may consult a business division advisor for a sample four-semester plan and more detailed program- planning guidance.*

REQUIRED OPTION - COMPLETE ONE OPTION FROM THE LIST BELOW FOR 19-21 UNITS:

INFORMATION SYSTEMS OPTION - COMPLETE 21 UNITS

REQUIRED CORE- COMPLETE 12 UNITS

CSCI 270	[1]	Introduction to Programming	3
CSCI 220	[1]	Business Information Systems	3
CSCI 221	[2]	Programming With Visual BASIC	3
CSCI 290	[4]	Computer Science Final Project	3

ELECTIVES- COMPLETE 9 UNITS (DISCUSS WITH A FACULTY ADVISOR)

CSCI 222	[NP]	Advanced Visual BASIC	3
CSCI 223	[NP]	Spreadsheet Software	3
CSCI 224	[NP]	Intermediate Word Processing	3
CSCI 230	[NP]	Database Management Systems	3
CSCI 231	[NP]	Database Programming with SQL	3
CSCI 232	[NP]	Database Server Administration	3
CSCI 253	[NP]	Web Database Development	3

TOTAL UNITS FOR INFORMATION SYSTEMS OPTION 21

NETWORKING OPTION - COMPLETE 19 UNITS

REQUIRED CORE- COMPLETE 10 UNITS

CSCI 240	[1]	Networking Essentials	4
CSCI 270	[1]	Introduction to Programming	3
CSCI 290	[4]	Computer Science Final Project	3

ELECTIVES- COMPLETE 9 UNITS (DISCUSS WITH A FACULTY ADVISOR)

CSCI 210	[NP]	Introduction to UNIX/Linux System and Programming	3
CSCI 211	[NP]	Unix/Linux Administration	3
CSCI 213	[NP]	Windows Server OS	3
CSCI 231	[NP]	Database Programming with SQL	3
CSCI 232	[NP]	Database Server Administration	3
CSCI 241	[NP]	Advanced Networking & Security	3
CSCI 242	[NP]	Directory Services	3

TOTAL UNITS FOR NETWORKING OPTION 19

PROGRAMMING OPTION - COMPLETE 21 UNITS

REQUIRED CORE- COMPLETE 12 UNITS

CSCI 270	[1]	Introduction to Programming	3
CSCI 271	[2]	Problem Solving and Programming 1	3
CSCI 210	[NP]	Intro to UNIX/Linux System & Programming	3
CSCI 290	[4]	Computer Science Final Project	3

ELECTIVES- COMPLETE 9 UNITS (DISCUSS WITH A FACULTY ADVISOR)

CSCI 204	[NP]	Discrete Structures for Computer Science	3
CSCI 211	[NP]	Unix/Linux Administration	3
CSCI 221	[NP]	Programming With Visual BASIC	3
CSCI 222	[NP]	Advanced Visual BASIC	3
CSCI 252	[NP]	Script Programming for the Web	3
CSCI 253	[NP]	Web Database Development	3
CSCI 272	[NP]	Problem Solving and Programming 2	3
CSCI 273	[NP]	Assembly Language Programming	3
CSCI 274	[NP]	Windows Programming With Visual Studio	3

TOTAL UNITS FOR PROGRAMMING OPTION 21

TOTAL UNITS IN A.S. MAJOR AFTER COMPLETING AN OPTION ABOVE ... 19 -21

Dance
PROGRAM
(209) 575-6081

A.A. DEGREE:
DANCE

The Associate in Arts in Dance is intended for students who plan to enter the workforce as a choreographer, teacher or performing artist. Dance as an academic discipline focuses on dance as a performing art, as well as its social functions in other areas, including education, health, cultural studies, art, history, and the science of human movement. This degree provides an educational and practical foundation for students pursuing a professional career in dance. It is designed to create avenues toward further study in educational dance, intermediate to advanced technique, choreography, and dance performance. The Associate Degree in Dance will prepare students to gain entry level employment with private dance studios, charter schools and recreational programs with a dance emphasis. Career opportunities also exist in highly competitive professional dance companies, amusement parks, commercial dance, and teaching. There are choreography opportunities with dance and theatre companies. Students should be aware that career opportunities in dance performance related fields are highly competitive.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Demonstrate and apply knowledge of the history of dance as it relates to western culture, including Ballet, Modern, Jazz, Musical Theatre, and ethnic forms of dance.*
2. *Demonstrate technical ability to at least the intermediate level in modern, ballet, and jazz dance.*
3. *Process a mastery of dance terminology as it relates to technical skill in modern, ballet, and jazz dance.*
4. *Create dance choreography using the principles of composition for in class demonstrations or live public performances.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below. Students who plan to transfer to a four year college or university should consult with a Dance faculty advisor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 11 UNITS

DANCE 102	[NP]	Introduction to World Dance	3
DANCE 111	[1]	Modern Dance 1	1
DANCE 112	[2]	Modern Dance 2	1
DANCE 121	[1]	Ballet 1	1
DANCE 131	[1]	Jazz 1	1
DANCE 155	[NP]	Fundamentals of Choreography 1	2
DANCE 181	[NP]	Dance Rehearsal & Performance 1	2

ELECTIVE TECHNIQUE COURSES - COMPLETE 5 UNITS

DANCE 113	[NP]	Modern Dance 3	1
DANCE 114	[NP]	Modern Dance 4	1
DANCE 122	[NP]	Ballet 2	1
DANCE 123	[NP]	Ballet 3	1
DANCE 124	[NP]	Ballet 4	1
DANCE 132	[NP]	Jazz 2	1
DANCE 133	[NP]	Jazz 3 Intermediate/Advanced	1
DANCE 141	[NP]	Hip Hop	1
DANCE 151	[NP]	Movement for the Performing Artist	3

ELECTIVE PRODUCTION COURSES - COMPLETE 4 UNITS

DANCE 182	[NP]	Dance Rehearsal & Performance 2	2
DANCE 183	[NP]	Dance Rehearsal & Performance 3	2
DANCE 184	[NP]	Dance Rehearsal & Performance 4	2
DANCE 187	[NP]	Contemporary Pop Dance Rehearsal and Performance	2
DANCE 188	[NP]	Dance Workshop Performance	2
DANCE 189	[NP]	Dance Repertory Touring Competition	1
THETR 190	[NP]	Theatre Production Workshop	1

TOTAL UNITS IN A.A. MAJOR 20

Earth Sciences
PROGRAM
(209) 575-6173

A.S. DEGREE:
EARTH SCIENCES

ABOUT THIS EMPHASIS

This A. S. is designed as a University Preparation, Emphasis in Earth Sciences. The University Preparation degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. This program is designed as an introductory study of the many branches of earth science, geology, oceanography, meteorology, and astronomy. Topics include the scientific method, natural resources, minerals, rocks, volcanism, plate tectonics, earthquakes, weathering, erosion, geological time, fresh water, oceans, ocean currents, the ocean floor, the atmosphere, clouds, storms, climate, the sun, the moon, the solar system, stars, interstellar matter, and the formation of the universe.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Identify, describe, and explain the causes and consequences of the various physical processes that transfer energy into, within, and out of the earth system.*
2. *Identify, describe, and explain the causes and consequences of the various chemical processes that control the transformation of matter within the earth system.*
3. *Identify, describe, and explain the causes and consequences of the various interactions between the biosphere and the physical components of the earth system.*

EMPHASIS REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 21 UNITS

EASCI 161	[NP]	Earth Science	4 OR
GEOL 161	[NP]	Physical Geology	4
GEOL 166	[NP]	Historical Geology	4
PHYS 101	[NP]	General Physics: Mechanics	4 OR
PHYS 142	[NP]	Mechanics, Heat, & Waves	4
MATH 171	[NP]	Calculus: First Course	4
CHEM 101	[NP]	General Chemistry 1	5

ELECTIVE COURSES - COMPLETE 8 UNITS

Please refer to www.assist.org for your chosen transfer university and specific major, and use that information to select at least eight units from the following list of electives. Additional courses may be required by your transfer university.

ASTRO 151	[NP]	Introduction to Astronomy Lab	1
ASTRO 160	[NP]	Introduction to Modern Astronomy	3
BIO 101	[NP]	Biological Principles	4
BIO 111	[NP]	General Biology	4
CHEM 102	[NP]	General Chemistry 2	5
EASCI 162	[NP]	Oceanography	4
MATH 172	[NP]	Calculus: Second Course	4
METEO 161	[NP]	Introduction to Meteorology	4
NR 200	[NP]	Soils	3
PHYS 142	[NP]	Mechanics, Heat, & Waves	4
PHYS 143	[NP]	Electricity, Magnetism, Optics, Atomic and Nuclear Structure	4
ZOOL 101	[NP]	General Zoology	4

TOTAL UNITS IN A.S. MAJOR 29

Electronics Technology
PROGRAM
(209) 575-6332

A.S. DEGREE:
INDUSTRIAL ELECTRONICS

The Industrial Electronics Program prepares students for careers as Engineering Technologists and Instrumentation/Automation Technicians. Students receive theoretical and laboratory instruction in electrical/electronic principles, analog and digital devices, electrical/electronic systems, sensors and controls, PLCs, PACs, industrial equipment, and control systems.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform basic troubleshooting and electrical oriented repairs an installations in accordance to industry standards.*
2. *Work successfully in the Power Utility, Building Trades, and/or Manufacturing Industry.*
3. *Comply with current electrical/engineering safety and environmental standards.*
4. *Natural Science (GELO): Explaining how the scientific method is used to solve problems.*
5. *Humanities (GELO): Demonstrating the ability to make well considered aesthetic judgments.*
6. *Language and Rationality (GELO): Demonstrate the ability to find, evaluate and use information in a variety of formats.*
7. *Health Education (GELO): Evaluating the impact of daily decisions on life and health.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the MJC Associate Degree Requirements in addition the coursework below. All required courses in the program must be completed with a C or better.

REQUIRED COURSES - COMPLETE 32.5 UNITS

ELTEC 265	[NP]	Troubleshooting Techniques	1
ELTEC 322	[1]	Technical Measurements	3
ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3
ELTEC 205	[1, 2]	Electronics Fabrication and Assembly Techniques	3
ELTEC 320	[1, 2]	Electrical Safety	1
ELTEC 212	[2]	Digital Principles and Circuits	3
ELTEC 223	[2]	Industrial Electrical Components and Control Devices	3
ELTEC 226	[3]	Motors, Controls and Controllers	3
ELTEC 232	[3]	Introduction to Programmable Logic Controllers	3
ELTEC 221	[3, 4]	Instrumentation Devices and Systems	3
ELTEC 229	[4]	Commercial & Industrial Wiring	3.5
ELTEC 234	[4]	Introduction to PACs: Programmable Automation Controllers	3

TOTAL UNITS IN A.S. MAJOR 32.5

CERTIFICATE OF ACHIEVEMENT:
ELECTRICIAN

The Electrician Program prepares students for careers in electrical installation and repair for the Public Utilities, Manufacturing and Construction industries. Students will study the principles of electricity, wiring, common devices, components, and PLCs.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Build circuits for power distribution or motor controls based on a schematic.*
2. *Perform measurements in a circuit and draw conclusions based on them for troubleshooting purposes.*
3. *Estimate ratings for basic components that make up an electrical circuit.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in this major, the student must complete all courses listed in required courses category below. All required courses in the program must be completed with a C or better.

REQUIRED COURSES - COMPLETE 32.5 UNITS

ELTEC 265	[NP]	Troubleshooting Techniques	1
ELTEC 322	[1]	Technical Measurements	3
ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3
ELTEC 320	[1, 2]	Electrical Safety	1
ELTEC 223	[2]	Industrial Electrical Components and Control Devices	3
ELTEC 225	[2]	Residential Wiring	3
ELTEC 230	[2, 3]	Blueprint Reading for Electricians	2
ELTEC 235	[2, 3]	NEC: National Electrical Codes	4
ELTEC 226	[3]	Motors, Controls and Controllers	3
ELTEC 221	[3, 4]	Instrumentation Devices and Systems	3
ELTEC 232	[3, 4]	Introduction to Programmable Logic Controllers	3
ELTEC 229	[4]	Commercial & Industrial Wiring	3.5

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 32.5

CERTIFICATE OF ACHIEVEMENT: **ELECTRO-MECHANIC**

The Electro-Mechanic Program prepares students interested in career opportunities in Plant or Facilities Maintenance by offering electrical preparation with mechanic knowledge and skills exposure. Students receive the principles in AC/DC electricity, wiring, motor controllers, welding, machine shop, pneumatic/hydraulics and PLC .

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform typical electrical maintenance or installation tasks for industrial environments.*
2. *Perform typical mechanical maintenance or installation tasks for industrial environments.*
3. *Estimate ratings for basic components of a motor circuit and build the control and power circuits.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in this major, the student must complete all courses listed in required courses category below. All required courses in the program must be completed with a C or better.

REQUIRED COURSES - COMPLETE 33.5 UNITS

ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3
ELTEC 322	[1]	Technical Measurements	3
ELTEC 320	[1, 2]	Electrical Safety	1
WELD 200	[1, 2]	Arc & Gas Welding	3
MACH 200D	[1, 2]	Introduction to Manual Machining	4
ELTEC 223	[2]	Industrial Electrical Components and Control Devices	3
WELD 206	[2, 3]	Gas Tungsten Arc Welding (G.T.A.W.)	3
ELTEC 226	[3]	Motors, Controls and Controllers	3
AGM 262	[3, 4]	Hydraulics/Pneumatics	3
ELTEC 232	[3, 4]	Introduction to Programmable Logic Controllers	3
ELTEC 229	[3, 4]	Commercial & Industrial Wiring	3.5
ELTEC 265	[NP]	Troubleshooting Techniques	1

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....33.5

CERTIFICATE OF ACHIEVEMENT: **INDUSTRIAL ELECTRONICS**

The Industrial Electronics Program prepares students for careers as Engineering Technologists and Instrumentation/Automation Technicians. Students receive theoretical and laboratory instruction in electrical/electronic principles, analog and digital devices, electrical/electronic systems, sensors and controls, PLCs, PACs, industrial equipment, and control systems.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform basic troubleshooting and electrical oriented repairs an installations in accordance to industry standards.*
2. *Work successfully in the Power Utility, Building Trades, and/or Manufacturing Industry.*
3. *Comply with current electrical/engineering safety and environmental standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete all required courses with a C or better, as indicated.

REQUIRED COURSES - COMPLETE 32.5 UNITS

ELTEC 265	[NP]	Troubleshooting Techniques	1
ELTEC 322	[1]	Technical Measurements	3
ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3
ELTEC 205	[1, 2]	Electronics Fabrication and Assembly Techniques	3
ELTEC 320	[1, 2]	Electrical Safety	1
ELTEC 212	[2]	Digital Principles and Circuits	3
ELTEC 223	[2]	Industrial Electrical Components and Control Devices	3
ELTEC 226	[3]	Motors, Controls and Controllers	3
ELTEC 232	[3]	Introduction to Programmable Logic Controllers	3
ELTEC 221	[3, 4]	Instrumentation Devices and Systems	3
ELTEC 229	[4]	Commercial & Industrial Wiring	3.5
ELTEC 234	[4]	Introduction to PACs: Programmable Automation Controllers	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....32.5

SKILLS RECOGNITION AWARD: **AUTOMATION TECHNICIAN**

The Automation Technician Skills Recognition Award is designed for practicing technicians in the field or advanced Industrial Electronics students seeking to increase their skills in Automation and Systems Integration.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Analyze typical process lines that include conveyors, pumps, ventilation, and other commercial and industrial systems.*
2. *Implement modifications into existing control circuits incorporating sensing devices to enhance automated capabilities.*
3. *Analyze and modify typical control programs in standard PLCs, PACs, and HMIs devices.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete all required courses with a C or better.

REQUIRED COURSES - COMPLETE 14 UNITS

CMPET 214	[1, 2]	Microprocessor Programming & Interfacing	3
ELTEC 232	[1, 2]	Introduction to Programmable Logic Controllers	3
ELTEC 221	[2, 3]	Instrumentation Devices and Systems	3
ELTEC 234	[3, 4]	Introduction to PACs: Programmable Automation Controllers	3
ELTEC 236	[4]	HMI & Industrial Communications	2

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 14

SKILLS RECOGNITION AWARD: **ELECTRICAL INSTALLER**

This program provides skill preparation courses intended to quickly prepare students to begin their careers in the industry as electrician assistants. Students will be exposed to basic safety, electrical theory and wiring techniques.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform common tasks related to electrical wiring following safety procedures, demonstrating professional quality and efficient workmanship.*
2. *Interpret typical schematics used in electrical installations or as descriptions of electrical controls.*
3. *Perform the required wiring of a standard circuit (e.g.: a 3-way lighting circuit) or a circuit shown in an electrical schematic.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete all required courses with a C or better.

REQUIRED COURSES - COMPLETE 12.5 UNITS

ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3
ELTEC 320	[1, 2]	Electrical Safety	1
ELTEC 225	[2]	Residential Wiring	3
ELTEC 230	[2, 3]	Blueprint Reading for Electricians	2
ELTEC 229	[4]	Commercial & Industrial Wiring	3.5

TOTAL UNITS FOR SKILLS RECOGNITION AWARD.....12.5

Elementary Teacher Education PROGRAM
(209) 575-6129

A.A.-T DEGREE:
ELEMENTARY TEACHER EDUCATION

The Associate in Arts in Elementary Teacher Education for Transfer Degree includes lower division coursework that is required for transfer and provides a broad overview of the fields in natural science, social sciences, humanities, composition, mathematics and critical thinking in order to prepare the future teacher for standards-based curriculum required in public schools.

The Associate in Arts in Elementary Teacher Education for Transfer (AA-T in Elementary Teacher Education) Degree is intended for students who plan to complete a bachelor's degree in elementary teacher education at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN ELEMENTARY TEACHER EDUCATION FOR TRANSFER (AA-T IN ELEMENTARY TEACHER EDUCATION) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate competence in the fields of study central to the California Board of Education content standards.*
2. *Define and explain the fundamental concepts of educational pedagogy including motivational theories, learning styles, and curriculum development.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts for Transfer Degree in this major, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

REQUIRED COURSES: 42 UNITS

SOCSC 110	[NP]	Introduction to Elementary Education	3
CLDDV 103	[NP]	Child Growth and Development	3
BIO 111	[NP]	General Biology	4
EASCI 161	[NP]	Earth Science	4
PHSCI 180	[NP]	Conceptual Physical Science: A Hands-On Approach	4
MATH 105	[NP]	Structure of Mathematics 1	3
COMM 100	[NP]	Fundamentals of Public Speaking	3
ENGL 101	[NP]	Composition and Reading	3
ENGL 102	[NP]	Advanced Composition & Introduction to Literature	3
GEOG 110	[NP]	World Regional Geography	3
HIST 106	[NP]	World Civilization to the 16th Century	3
HIST 101	[NP]	History of the United States to 1877	3
POLSC 101	[NP]	American Politics	3

LIST A: (SELECT ONE): 3 UNITS

ENGL 103	[NP]	Advanced Composition & Critical Thinking	3
PHILO 105	[NP]	Critical Reasoning and Analytic Writing	3
PHILO 107	[NP]	Philosophy of Science	3
COMM 104	[NP]	Argumentation	3

LIST B: (SELECT ONE:) 3 UNITS

ART 160	[NP]	Appreciation of Art	3
DANCE 102	[NP]	Intro to World Dance	3
MUSG 101	[NP]	Music Appreciation	3
THETR 100	[NP]	Introduction to Theatre Arts	3

LIST C: 0- 12 ADDITIONAL UNITS

ART 120	[NP]	Basic Drawing 1	3
CSCI 201	[NP]	General Computer Literacy	3
COMM 102	[NP]	Introduction to Human Communication	3 OR
COMM 106	[NP]	Group & Organizational Communication	3
HUMAN 101	[NP]	Introduction to the Humanities	3
HUMAN 105	[NP]	Early Humanistic Traditions	3
HUMAN 106	[NP]	Humanities in the Modern World	3
HUMAN 110	[NP]	East Meets West	3
MATH 106	[NP]	Structure of Mathematics 2	3
SOCSC 109	[NP]	Introduction to Education-Practicum in Tutoring	3

TOTAL UNITS FOR THE A.A.-T MAJOR..... 48

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	34-40
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE UNITS)	9-13

TOTAL UNITS (MAXIMUM) FOR A.A.-T DEGREE..... 60

Emergency Medical Technician PROGRAM
(209) 575-6332

SKILLS RECOGNITION: EMERGENCY MEDICAL TECHNICIAN

The Emergency Medical Technician-Basic (EMT-Basic) Program, provides the student with an outline of the EMS system, introduces assessment skills, as well as provides pathophysiology of common neurological, respiratory, and cardiac related emergencies. The EMT-1 program prepares emergency medical technicians for the National Registry EMT Basic Exam. Upon successful completion EMTs may perform as ambulance attendants, fire emergency responders, or practice in private industry. It covers techniques of emergency medical care presently considered within the responsibilities of the emergency medical technician, and emphasizes the development of student skills in recognition of symptoms of illnesses and injuries and proper procedures of emergency care. Successful EMT-Basic students may find employment with fire agencies, private ambulance companies, California Department of Forestry, ER techs, and other assorted jobs. Many successful EMT-1 students have also gone onto paramedic school, medical school, nursing school, physician's assistant school, and other associated allied health professions

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Pass the National Registry Exam for certification as an Emergency Medical Technician.*
2. *Demonstrate compliance with regulations of the National Registry of Emergency Medical Technician.*

Course expenses vary for each individual. The estimated cost for EMS 390 is $250-450 which includes enrollment and materials fees, health clearance, books, and certification examination. For information on Financial Aid, call (209) 575-7700.

REQUIRED COURSES

To earn a Skills Recognition Award, the student must complete the following required course with a grade of C or better.

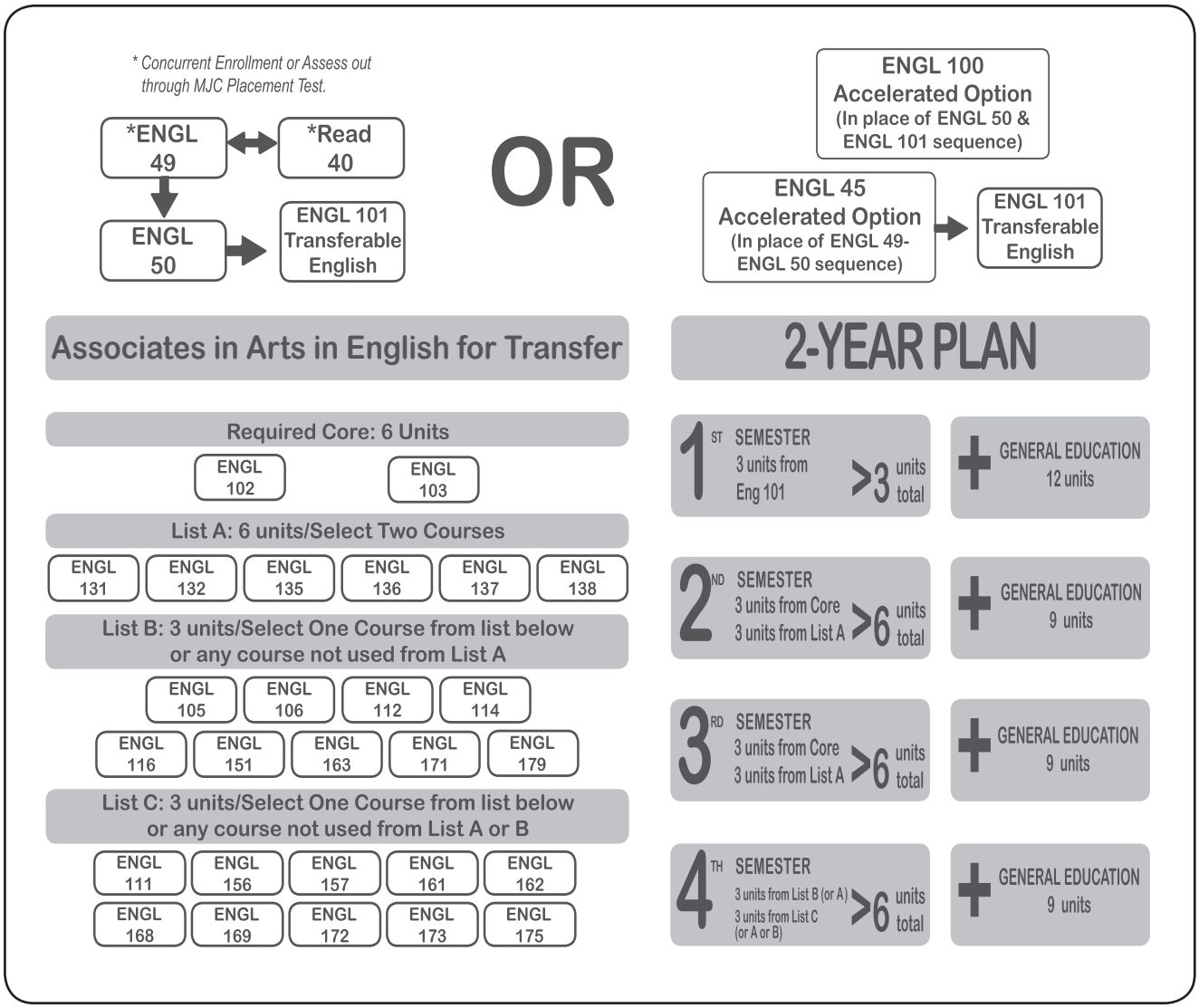
EMS 390	[NP]	Emergency Medical Technician 1	6

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 6

POLICY FOR DENIAL OF CERTIFICATION

The law provides for denial of certification for crimes or acts that may in any way be related to pre-hospital medical care i.e., sex crimes, drug crimes and crimes of violence or dishonesty. In such cases it is the applicant's responsibility to present sufficient evidence of rehabilitation to the Mountain-Valley Emergency Medical Services Agency prior to applying for certification. The Mountain-Valley EMS Agency will evaluate applicants individually. Any student considering a career as an Emergency Medical Technician, who might be denied certification, is advised to address this issue with this Agency prior to taking this course.

Mountain-Valley Emergency Medical Services Agency
1101 Standiford Ave., Suite D1
Modesto, CA 95350
(209) 529-5085



English
PROGRAM
(209) 575-6159

For those who love to read, write, interpret, and create, majoring or minoring in English is the right choice. English courses are designed to give proficiency in skills that are highly regarded by society: the ability to read with comprehension and critical judgment, to communicate accurately and effectively both orally and in writing, to think logically, to do research and organize materials, and to interpret and appreciate literature. The English major can lead to a career in teaching as well as in professional fields such as law, medicine, publishing, information science, and business. In addition to pre-collegiate composition courses (Accelerated ENGL 45, ENGL 49, and ENGL 50) and transfer-level courses (Accelerated ENGL 100, ENGL 101, ENGL 102, and ENGL 103), the English program includes survey courses in English, American and world literature; introductory genre courses in poetry, fiction, and drama; and a number of topical courses such as Shakespeare, Bible as literature, ethnic literatures, folklore, and children's literature.

The program also offers creative writing courses in poetry, and fiction. English majors choose to take survey, writing, and literature courses based upon their areas of interest, but they should include a balanced load of genre and survey courses. Many students who become English majors at four-year colleges and universities are required to take introductory survey courses in American and British literature (ENGL 135, ENGL 136, ENGL 137, and ENGL 138). However, prospective English majors and minors are strongly urged to discuss their plans with MJC counselors and English faculty advisors regarding the specific lower-division requirements at the four-year colleges and universities they plan to attend.

A.A.-T DEGREE: **ENGLISH**

The Associate in Arts in English for Transfer (AA-T in English) degree includes lower division coursework that is required for transfer. The Associate in Arts in English for Transfer (AA-T in English) is designed for those who love to read, write, interpret, and create. A baccalaureate degree in English can lead to a career in teaching as well as in professional fields such as law, medicine, publishing, information science, and business. The English program includes survey courses in English, American, and world literature; introductory genre courses in poetry, fiction, and drama; and a number of topical courses such as Shakespeare, Bible as literature, ethnic literature, folklore, and children's literature. The program also offers creative writing courses in poetry and fiction.

The Associate in Arts in English for Transfer (AA-T in English) degree is intended for students who plan to complete a bachelor's degree in English at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Read, comprehend, and evaluate a variety of texts and various forms of media.*
2. *Write clear, organized work in a style suited for its purpose and audience.*
3. *Create professional-looking written work that shows careful editing and properly document sources.*
4. *Demonstrate an appreciation of literature by reading and analyzing works from various genres, periods, and cultures.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN ENGLISH FOR TRANSFER (AA-T IN ENGLISH) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

* Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.

PROGRAM REQUIREMENTS

To earn an Associate in Arts for Transfer Degree in this major, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

REQUIRED CORE: 6 UNITS

ENGL 103	[NP]	Advanced Composition & Critical Thinking	3
ENGL 102	[NP]	Advanced Composition & Introduction to Literature	3

LIST A: (SELECT TWO) 6 UNITS

ENGL 135	[NP]	Survey of American Literature to 1850	3
ENGL 136	[NP]	Survey of American Literature: 1850 to the Present	3
ENGL 137	[NP]	Survey of English Literature to the late 18th Century	3
ENGL 138	[NP]	Survey of English Literature: Late Eighteenth Century to Present	3
ENGL 131	[NP]	Introduction to World Literature 1	3
ENGL 132	[NP]	Introduction to World Literature 2	3

LIST B: (SELECT ONE) 3 UNITS

Any course from List A not already used			3
ENGL 105	[NP]	Creative Writing: Poetry	3
ENGL 106	[NP]	Creative Writing: Short Fiction	3
ENGL 112	[NP]	Introduction to the Novel and Short Story	3
ENGL 114	[NP]	Introduction to Poetry	3
ENGL 116	[NP]	Introduction to Drama	3
ENGL 151	[NP]	Folklore	3
ENGL 163	[NP]	Introduction to Shakespeare	3
ENGL 171	[NP]	Introduction to African-American Literature	3
ENGL 179	[NP]	Intro to Native American Lit, Mythology, and the Oral Tradition	3

LIST C: (SELECT ONE) 3 UNITS

ENGL 111	[NP]	Creative Writing: Creative Nonfiction	3
ENGL 156	[NP]	The Bible As Literature: The Hebrew Canon and Intertestamental Writings	3
ENGL 157	[NP]	The Bible As Literature: The New Testament	3
ENGL 161	[NP]	Film Appreciation	3
ENGL 162	[NP]	History of Cinema	3
ENGL 168	[NP]	Adolescent Literature	3
ENGL 169	[NP]	Children's Literature	3
ENGL 172	[NP]	Intro to Chicano/a Literature	3
ENGL 173	[NP]	Intro to Latin American Literature	3
ENGL 175	[NP]	Introduction to Women's Literature	3

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 18

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	9-11

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

English for Life and Work

NON-CREDIT PROGRAM
(209) 575-6159

CERTIFICATE OF COMPETENCY: ENGLISH FOR LIFE AND WORK: ELEMENTARY

With a Career Development and College Preparation (CDCP) certificate in English for Life and Work: Elementary, a student possesses basic interpersonal communication skills and understanding and use of the English language at the elementary level and demonstrates the ability to read, write, listen, and speak in a variety of common everyday life and work situations at this level.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply and use correct word order, grammar, and vocabulary encountered at the upper-elementary level to construct original sentences in guided exercises.*
2. *Recite and improvise dialogues demonstrating major social functions of language with increasing fluency and clear pronunciation.*
3. *Read and respond to short reading selections about everyday social and personal business comprehending expressions and vocabulary encountered in class using basic academic reading skills.*
4. *Write original sentences, short notes, and letters as well as familiar sentences accurately.*

PROGRAM REQUIREMENTS

To receive a CDCP certificate in English for Life and Work: Elementary, students must complete courses culminating in the successful completion of ELW 903.

REQUIRED COURSES: ALL NON-CREDIT

ELW 901	[1]	Beginning English for Life and Work	0
ELW 902	[1]	Elementary English for Life and Work	0
ELW 903	[1]	Higher Elementary English for Life and Work	0

TOTAL UNITS REQUIRED IN CERTIFICATE OF COMPETENCY..... 0

CERTIFICATE OF COMPETENCY: ENGLISH FOR LIFE AND WORK: PROFICIENT

With a Career Development and College Preparation (CDCP) certificate in English for Life and Work: Proficient, a student possesses basic interpersonal communication skills and understanding and use of the English language at the low-advanced level and demonstrates the ability to read, write, listen, and speak in a variety of everyday life and work situations at this level.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Possess accurate understanding of, apply, and use most English grammatical structures to meet most needs and demands in a variety of life and workplace situations using vocabulary at the low-advanced level.*
2. *Respond confidently, fluently, and accurately to a wide variety of social, personal, and professional situations at the low-advanced level.*
3. *Read, respond, summarize, and interpret low-advanced reading passages and authentic documentation in varying modes and formats using a wide range of academic reading skills and reading strategies.*
4. *Compose resumes, summaries, reports, evaluations, business letters, e-mails, memos, instructions, and multi-paragraph compositions using academic vocabulary and accurate use of grammar at the low-advanced level.*

PROGRAM REQUIREMENTS

To receive a CDCP certificate in English for Life and Work: Proficient, students must complete courses culminating in the successful completion of ELW 906.

REQUIRED COURSES: ALL NON-CREDIT

ELW 904	[1]	Intermediate English for Life and Work	0
ELW 905	[1]	High Intermediate English for Life and Work	0
ELW 906	[1]	Low Advanced English for Life and Work	0

TOTAL UNITS REQUIRED IN CERTIFICATE OF COMPETENCY..... 0

Environmental Horticulture Science
PROGRAM
(209) 575-6200

A.S. DEGREE:
ENVIRONMENTAL HORTICULTURAL SCIENCE

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Identify and appraise the educational requirements for career opportunities in the horticulture industry.*
2. *Perform nursery practices necessary to be successful in the horticulture industry.*
3. *Identify landscape plants found in the Central Valley of California and describe the cultural characteristics, and growth habits, for each.*
4. *Demonstrate the effective work habits and inter-personal communication skills required by employers in the horticulture industry.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES – COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2
AG 259A-D **	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES – COMPLETE 6 UNITS

ANSC 200	[NP]	Introduction to Animal Science	3
NR 200	[2, 3,4]	Soils	3
AGM 200	[2, 3,4]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[3,4]	Elements of Agricultural Economics	3 OR
AGEC 200	[3,4]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES – COMPLETE 12 UNITS

PLSC 200	[1]	Introduction to Plant Science	3
EHS 201	[2,3,4]	Plant Identification & Usage 1	3
EHS 202	[2,3,4]	Plant Identification & Usage 2	3
EHS 210	[1]	Introduction to Environmental Horticulture Science	3

IV. AGRICULTURE MAJOR ELECTIVES – COMPLETE 7 UNITS

EHS 215	[2,3,4]	Landscape Design	3
EHS 220	[2,3,4]	Turfgrass Management	3
EHS 235	[2,3,4]	Plant Propagation/Production	3
EHS 276	[NP]	Landscape Maintenance	3
EHS 278	[NP]	Landscape Construction and Installation	3
EHS 280	[NP]	Principles of Floral Art and Design	3
EHS 281	[2,3,4]	Advanced Floral Design	3
NR 222	[NP]	Native Tree and Shrub Identification	3
PLSC 250	[2,3,4]	Plant Nutrition and Fertilizer	3
PLSC 255	[2,3,4]	Plant Pest Control	3
PLSC 260	[2,3,4]	Plant Disease Control	3

TOTAL UNITS IN A.S. MAJOR 30

**Required*
***Internship/Work Experience must be Agriculture related.*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking Ag 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

CERTIFICATE OF ACHIEVEMENT:
COMMERCIAL FLORISTRY TECHNICIAN

The Commercial Floristry Program prepares students to enter the field of Floral Design and Flower Shop Management. The program is designed to provide entry level skills, and further, to prepare students for advancement within this ever-changing and dynamic industry.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.*
2. *Demonstrate general nursery practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.*
3. *Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.*
4. *Demonstrate good work habits and inter-personal communication skills that employers demand.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115*	[1]	Introduction to Agricultural Education & Careers	1
AG 259A-D **	[1]	Agricultural Work Experience	4 OR
AG 249 **	[NP]	Agriculture Internship	2

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[1]	Introduction to Plant Science	3
NR 200	[3]	Soils	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 225	[NP]	Agriculture Computer Applications	3 OR
AGEC 210	[3,4]	Elements of Agricultural Economics	3 OR
AGEC 200	[3,4]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES- COMPLETE 21 UNITS

EHS 201	[1, 2]	Plant Identification & Usage 1	3
EHS 210	[1]	Introduction to Environmental Horticulture Science	3
EHS 280	[1]	Principles of Floral Art and Design	3
EHS 281	[2, 3, 4]	Advanced Floral Design	3
AGEC 280	[4]	Agricultural Sales and Service	3
COMM 102	[1]	Introduction to Human Communication	3
PLSC 255	[3,4]	Plant Pest Control	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 35

**Required*
***Internship/Work Experience must be Agriculture related.*

CERTIFICATE OF ACHIEVEMENT: LANDSCAPE AND PARK MAINTENANCE

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform practices related to the maintenance of residential and commercial landscapes.*
2. *Identify landscape plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.*
3. *Demonstrate effective work habits and interpersonal communication skills required by employers in the landscape and park maintenance industry.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

I. MAJOR REQUIRED COURSES - COMPLETE 21 UNITS

EHS 201	[2,3,4]	Plant Identification & Usage 1	3
EHS 202	[2,3,4]	Plant Identification & Usage 2	3
EHS 210	[1]	Introduction to Environmental Horticulture Science	3
EHS 276	[2,3,4]	Landscape Maintenance	3
EHS 278	[2,3,4]	Landscape Construction and Installation	3
NR 200	[2,3,4]	Soils	3
PLSC 200	[1, 2]	Introduction to Plant Science	3

II. AGRICULTURE MAJOR ELECTIVES - COMPLETE 3 UNITS

AGM 200	[2, 3]	Introduction to Mechanical Technology	3
AGM 215	[2, 3]	Machinery Management	3
AGM 289	[2, 4]	Principles of Power Mechanics/Small Engines	3
EHS 220	[3, 4]	Turfgrass Management	3
NR 222	[3]	Native Tree and Shrub Identification	3
PLSC 250	[2, 3]	Plant Nutrition and Fertility	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 24

CERTIFICATE OF ACHIEVEMENT: LANDSCAPE DESIGN

The Landscape Design Program prepares students to enter the field of landscape design at the entry level. The program is for students interested in learning the more pragmatic and applications aspect of landscaping and is directed to the application of established scientific and engineering knowledge and methods.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *List at least five career opportunities in the horticulture industry, both locally and within the State of California and the United States.*
2. *Demonstrate general nursery practices of the industry, including transplanting, plant identification, identification of health related issues, and general horticulture practices necessary to be successful in the horticulture industry.*
3. *Identify 300 plants found in the Central Valley of California and describe the cultural characteristics, as well as growth habits, for each.*
4. *Demonstrate good work habits and inter-personal communication skills that employers demand.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 20 UNITS

NR 200	[2,3,4]	Soils	3
EHS 201	[2,3,4]	Plant Identification & Usage 1	3
EHS 202	[2,3,4]	Plant Identification & Usage 2	3
EHS 210	[1]	Introduction to Environmental Horticulture Science	3
EHS 215	[2,3,4]	Landscape Design	3
AG 115	[1]	Introduction to Agricultural Education & Careers	1
AG 259A-D	[2,3,4]	Agriculture Work Experience.	4

ELECTIVE COURSES - COMPLETE 9 UNITS

EHS 276	[NP]	Landscape Maintenance	3
EHS 278	[NP]	Landscape Construction and Installation	3
NR 222	[NP]	Native Tree and Shrub Identification	3
CSCI 201	[NP]	General Computer Literacy	3 OR
AGEC 225	[NP]	Agriculture Computer Applications	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 29

CERTIFICATE OF ACHIEVEMENT: NURSERY PRODUCTION

In this program, the student will develop skills relating to plant identification, propagation, and growing for sale, operations, and maintenance of plant nursery equipment and structures. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform nursery practices necessary to be successful in the nursery production industry.*
2. *Identify nursery plants grown in California and describe the cultural characteristics and growth habits for each.*
3. *Demonstrate the effective work habits and interpersonal communication skills required by employers in the nursery production industry.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

MAJOR REQUIRED COURSES - COMPLETE 15 UNITS

EHS 201	[2,3,4]	Plant Identification & Usage 1	3
EHS 202	[2,3,4]	Plant Identification & Usage 2	3
EHS 210	[1]	Introduction to Environmental Horticulture Science	3
EHS 235	[2,3,4]	Plant Propagation/Production	3
NR 200	[2,3,4]	Soils	3

AGRICULTURE MAJOR ELECTIVES - COMPLETE 6 UNITS

AGM 289	[2, 4]	Principles of Power Mechanics/Small Engines	3
EHS 215	[3]	Landscape Design	3
EHS 276	[NP]	Landscape Maintenance	3
EHS 278	[NP]	Landscape Construction and Installation	3
NR 222	[3]	Native Tree and Shrub Identification	3
PLSC 250	[2, 3]	Plant Nutrition and Fertilizer	3
PLSC 255	[2,3,4]	Plant Pest Control	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 21

Ethnic Studies
PROGRAM
(209) 575-6129

SKILLS RECOGNITION:
ETHNIC STUDIES

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Understand how race and ethnic relations have been shaped by economic, social, cultural, and political realities.*
2. *Demonstrate familiarity with various methodological approaches to the terrains of race and ethnicity, especially in their relation to identity, inequality, culture, and history.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 6 UNITS FROM THE LIST BELOW

ANTHR 102	[NP]	Cultural Anthropology	3
HIST 107	[NP]	World Civilization From the 16th Century	3
COMM 130	[NP]	Intercultural Communication	3

COMPLETE ONE OPTION FOR 9 UNITS, WITH 3 UNITS COMPLETED IN EACH CONCENTRATION:

I. INTERNATIONAL STUDIES OPTION

A. EXAMINING CULTURE THROUGH THE ARTS AND LITERATURE - COMPLETE 3 UNITS

ART 169	[NP]	Survey of Asian Art	3
ENGL 131	[NP]	Introduction to World Literature 1	3
ENGL 132	[NP]	Introduction to World Literature 2	3
ENGL 151	[NP]	Folklore	3
ENGL 173	[NP]	Intro to Latin American Literature	3
HUMAN 110	[NP]	East Meets West	3
MUSG 102	[NP]	Introduction to World Music	3
DANCE 102	[NP]	Introduction to World Dance	3

B. EXAMINING HISTORICAL AND POLITICAL PERSPECTIVES – COMPLETE 3 UNITS

BUSAD 208	[NP]	Introduction to International Business	3
GEOG 110	[NP]	World Regional Geography	3
HIST 106	[NP]	World Civilization to the 16th Century	3
HIST 125	[NP]	History of Mexico	3
POLSC 110	[NP]	International Relations	3

C. EXPLORING CULTURAL AND SOCIOLOGICAL ISSUES – COMPLETE 3 UNITS

ANTHR 140	[NP]	Magic, Witchcraft, and Religion	3
ANTHR 150	[NP]	Native People of North America	3
GEOG 102	[NP]	Cultural Geography	3
HUMAN 130	[NP]	Introduction to Western Religions	3
SOCSC 105	[NP]	Women's Studies	3

II. DOMESTIC STUDIES OPTION

A. EXAMINING CULTURE THROUGH ARTS AND LITERATURE – COMPLETE 3 UNITS

ENGL 171	[NP]	Introduction to African-American Literature	3
ENGL 172	[NP]	Introduction to Chicano/a Literature	3
ENGL 179	[NP]	Intro to Native American Lit, Mythology, and the Oral Tradition	3
SPAN 112	[NP]	Introduction to Chicano/a Literature	3

B. EXAMINING HISTORICAL AND POLITICAL PERSPECTIVES - COMPLETE 3 UNITS

HIST 113	[NP]	Social and Cultural Hist of the U.S. prior to the 20th Century	3
HIST 119	[NP]	Social and Cultural Hist. of 20th Century America	3
HIST 128	[NP]	The American West	3
HIST 154	[NP]	African Americans through the 19th Century	3
HIST 155	[NP]	African Americans in the 20th and 21st Centuries	3

C. EXPLORING CULTURAL AND SOCIOLOGICAL ISSUES - COMPLETE 3 UNITS

CLDDV 262	[NP]	Diversity in Educational Settings	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3
SOCIO 154	[NP]	African-American Cultures and Communities	3
SOCIO 156	[NP]	Mexican Culture in the United States	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 15

Fire Academy
PROGRAM
(209) 548 -5706

SKILLS RECOGNITION:
FIRE ACADEMY

The Fire Academy Skills Recognition Award verifies the satisfactory completion of the educational standards for Fire Fighter 1. The Academy does not meet the experience requirement for State Fire Marshal certification, but it does meet the educational and training requirements. Completion will be provided by the Technical Education division.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with state Fire Training Requirements for Firefighter I.*
2. *Demonstrate compliance with National Fire Protection Association Standards.*

REQUIRED PREPARATION

- Satisfactory completion of FSCI 301 and EMS 350 or EMS 390 with a grade of C or better.
- Satisfactory completion of a physical agility test with a valid CPAT card.
- Physician's statement of student health.

REQUIRED COURSES - COMPLETE 17 UNITS

FSCI 362	[2]	Basic Fire Academy	8
FSCI 363	[2]	Advanced Fire Academy	9

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 17

Fire Science
PROGRAM
(209) 548-5706

A.S. DEGREE:
FIRE SCIENCE

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with all laws, regulations, codes, and standards that influence fire department operation.*
2. *Demonstrate compliance with California State Fire Training Standards for Firefighter I.*
3. *Explain the flow requirements for fire apparatus, diagraming a pump and plumbing schematic.*
4. *Demonstrate the ability to respond safely and effectively to fire situations by explaining the requirements needed to respond to emergencies in private, city, state, and federal locations and describing the rank structure and job requirements for all positions.*
5. *Explain minimum qualifications and entry-level skills for fire fighter hiring, describing the following elements: application process, written exam process, physical agility exam process, interview process and chief's interview process.*
6. *Describe common types of building construction as well as conditions associated with structural collapse and firefighter safety.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements for Certificate of Achievement in Fire Science Courses.

REQUIRED COURSE - COMPLETE 3 UNITS

FSCI 301	[NP]	Fire Protection Organization	3

ELECTIVE COURSES - COMPLETE 27 UNITS

FSCI 302	[NP]	Fire Prevention Technology	3
FSCI 303	[NP]	Fire Protection Equipment & Systems	3
FSCI 304	[NP]	Building Construction for Fire Protection	3
FSCI 305	[NP]	Fire Behavior and Combustion	3
FSCI 311	[NP]	Rescue Systems 1	2
FSCI 322	[NP]	Fire Service Career Development/Promotions	3
FSCI 323	[NP]	Fire Hydraulics	3
FSCI 327	[NP]	Fire Apparatus and Equipment	3
FSCI 328	[NP]	Investigation of Fires	3
FSCI 332	[NP]	Fire Science Tactics & Strategy	3
FSCI 336	[NP]	Rescue Practices	3
FSCI 337	[NP]	Wildland Fire Control	3
FSCI 347	[NP]	Fire Prevention 1C	2.5
FSCI 350	[NP]	Fire Command 1A	2
FSCI 351	[NP]	Fire Command 1B	2
FSCI 352	[NP]	Training Instructor 1A	2.5
FSCI 353	[NP]	Training Instructor 1B	2.5
FSCI 354	[NP]	Fire Prevention 1A	2.5
FSCI 355	[NP]	Fire Prevention 1B	2.5
FSCI 357	[NP]	Fire Investigation 1	2.5
FSCI 362	[NP]	Basic Fire Academy	8
FSCI 363	[NP]	Advanced Fire Academy	9
FSCI 364	[NP]	Fire Apparatus Driver/Operator 1A	2
FSCI 366	[NP]	Fire Apparatus Driver/Operator 1B	2
FSCI 373	[NP]	Fire Instructor 2A	2.5
FSCI 374	[NP]	Fire Instructor 2B	2.5
EMS 350	[NP]	First Responder with Healthcare Provider CPR	3
EMS 380	[NP]	Basic ECG Interp/Intro to Cardiac Care	3
EMS 389	[NP]	Emergency Medical Technician 1- Clinical	0.5
EMS 390	[NP]	Emergency Medical Technician 1	6
EMS 391	[NP]	EMT 1 - Refresher Course	1.5

TOTAL UNITS IN A.S. MAJOR 30

CERTIFICATE OF ACHIEVEMENT: **FIRE SCIENCE**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with all laws, regulations, codes, and standards that influence Fire department operation.*
2. *Demonstrate compliance with California State Fire Training Standards for Firefighter I.*
3. *Explain the flow requirements for fire apparatus, diagraming a pump and plumbing schematic.*
4. *Demonstrate the ability to respond safely and effectively to fire situations by explaining the requirements needed to respond to emergencies in private, city, state, and federal locations and describing the rank structure and job requirements for all positions.*
5. *Explain minimum qualifications and entry-level skills for fire fighter hiring, describing the following elements: application process, written exam process, physical agility exam process, interview process and chief's interview process.*
6. *Describe common types of building construction as well as conditions associated with structural collapse and firefighter safety.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the coursework as indicated below. Each course must be completed with a grade of C or better.

REQUIRED COURSE - COMPLETE 3 UNITS

FSCI 301	[1]	Fire Protection Organization	3

ELECTIVE COURSES - COMPLETE 27 UNITS

FSCI 302	[2]	Fire Prevention Technology	3
FSCI 303	[2]	Fire Protection Equipment & Systems	3
FSCI 304	[2]	Building Construction for Fire Protection	3
FSCI 305	[1]	Fire Behavior and Combustion	3
FSCI 311	[NP]	Rescue Systems 1	2
FSCI 312	[NP]	Fire Investigation 2A	2
FSCI 322	[4]	Fire Service Career Development/Promotions	3
FSCI 323	[4]	Fire Hydraulic	3
FSCI 327	[2]	Fire Apparatus and Equipment	3
FSCI 328	[4]	Investigation of Fires	3
FSCI 332	[3]	Fire Science Tactics & Strategy	3
FSCI 336	[3]	Rescue Practices	3
FSCI 337	[3]	Wildland Fire Control	3
FSCI 347	[NP]	Fire Prevention 1C	2.5
FSCI 350	[NP]	Fire Command 1A	2
FSCI 351	[NP]	Fire Command 1B	2
FSCI 352	[NP]	Training Instructor 1A	2.5
FSCI 353	[NP]	Training Instructor 1B	2
FSCI 354	[NP]	Fire Prevention 1A	2.5
FSCI 355	[NP]	Fire Prevention 1B	2.5
FSCI 357	[NP]	Fire Investigation 1	2.5
FSCI 362	[2]	Basic Fire Academy	8
FSCI 363	[2]	Advanced Fire Academy	9
FSCI 364	[NP]	Fire Apparatus Driver/Operator 1A	2
FSCI 366	[NP]	Fire Apparatus Driver/Operator 1B	2
FSCI 367	[NP]	Fire Investigation 1B	2.5
FSCI 369	[NP]	Training Instructor 1C	2.5
FSCI 371	[NP]	Fire Command 2A	2.5
FSCI 372	[NP]	Fire Management 2B	2.5
FSCI 373	[NP]	Fire Instructor 2A	2.5
FSCI 374	[NP]	Fire Instructor 2B	2.5
EMS 350	[1]	First Responder with Health Care Provider CPR	3
EMS 380	[1]	Basic ECG Interp/Intro to Cardiac Care	3
EMS 389	[1]	Emergency Medical Technician 1-Clinical	0.5
EMS 390	[1]	Emergency Medical Technician 1	6
EMS 391	[NP]	EMT 1 - Refresher Course	1.5

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 30

General Education
PROGRAM
(209) 575-6058

CERTIFICATE OF ACHIEVEMENT: **CSU-GE PATTERN**

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in CSU General Education, the student must complete the requirements detailed in the CSU-GE Pattern. Each course must be completed with a grade of C or better. Students who plan to transfer to CSU should consult with a counselor about proper selection of courses, and General Education certification.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

Demonstrate proficiency in NATURAL SCIENCE by:

1. *Explaining how the scientific method is used to solve problems.*
2. *Describing how scientific discoveries and theories affect human activities.*

Demonstrate proficiency in SOCIAL AND BEHAVIORAL SCIENCE by:

1. *Describing the method of inquiry used by the social and behavioral sciences.*
2. *Describing how societies and social subgroups have operated in various times and cultures.*
3. *Analyzing the ways that individuals act and have acted in response to their societies.*

Demonstrate proficiency in the HUMANITIES by:

1. *Demonstrating awareness of the various ways that culture and ethnicity affect individual experience and society as a whole.*
2. *Demonstrating the ability to make well considered aesthetic judgments.*

Demonstrate proficiency in LANGUAGE AND RATIONALITY by:

1. *Demonstrating awareness of the interactive nature of communication involving effective listening, reading, writing, and speaking.*
2. *Demonstrating critical thinking in the analysis and production of communication.*
3. *Demonstrating the ability to find, evaluate, and use information in a variety of formats.*

Demonstrate proficiency in HEALTH EDUCATION by:

1. *Describing the integration of the physiological and psychological human being.*
2. *Analyzing the development of self and making plans for lifelong learning.*
3. *Evaluating the impact of daily decisions on life and health.*

CERTIFICATE OF ACHIEVEMENT: **IGETC PATTERN**

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in IGETC, the student must complete the requirements detailed in the IGETC Pattern. Each course must be completed with a grade of C or better. Students who plan to transfer to CSU or UC should consult with a counselor about proper selection of courses and General Education certification.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

Demonstrate proficiency in NATURAL SCIENCE by:

1. *Explaining how the scientific method is used to solve problems.*
2. *Describing how scientific discoveries and theories affect human activities.*

Demonstrate proficiency in SOCIAL AND BEHAVIORAL SCIENCE by:

1. *Describing the method of inquiry used by the social and behavioral sciences.*
2. *Describing how societies and social subgroups have operated in various times and cultures.*
3. *Analyzing the ways that individuals act and have acted in response to their societies.*

Demonstrate proficiency in the HUMANITIES by:

1. *Demonstrating awareness of the various ways that culture and ethnicity affect individual experience and society as a whole.*
2. *Demonstrating the ability to make well considered aesthetic judgments.*

Demonstrate proficiency in LANGUAGE AND RATIONALITY by:

1. *Demonstrating awareness of the interactive nature of communication involving effective listening, reading, writing, and speaking.*
2. *Demonstrating critical thinking in the analysis and production of communication.*
3. *Demonstrating the ability to find, evaluate, and use information in a variety of formats.*

Demonstrate proficiency in HEALTH EDUCATION by:

1. *Describing the integration of the physiological and psychological human being.*
2. *Analyzing the development of self and making plans for lifelong learning.*

General Studies
PROGRAM
(209) 575-6058

The Associate of Arts in General Studies with Emphasis provides an opportunity for you to earn an Associate of Arts (AA) degree in a comprehensive area of study. This degree is intended for students who may not be planning to transfer to a university in the near future. The General Studies degree is intended to provide both breadth and depth of education. Breadth is achieved by completion of the 18-unit MJC-GE Pattern for the Associate's Degree. Depth is achieved when you complete an additional 18-unit Emphasis in one of four areas: Natural Sciences, Social and Behavioral Sciences, Humanities, or Language and Rationality. By completing this pattern of study, you will have a "well rounded" education in addition to lower-division course work in related disciplines which can be used as preparation for a field of study.

A.A. DEGREE: **GENERAL STUDIES, EMPHASIS IN HUMANITIES**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe how the performing and visual arts, literature, languages and the social sciences have influenced societies in various times.*
2. *Analyze ways in which the performing and visual arts, literature, languages and the social sciences allow for individuals and social groups to form creative and critical responses to their societies and environment.*
3. *Demonstrate awareness of the various ways that the performing and visual arts, literature, languages and the social sciences provide creative and critical venues for expressing how culture, ethics, history, belief, and ethnicity affect individual experience and society as a whole.*
4. *Demonstrate the ability to interpret and analyze the performing and visual arts, literature, languages and the social sciences for meaning and to forge aesthetic, moral, social, political and historical judgments.*
5. *Demonstrate critical thinking in the analysis of artistic, literary, linguistic and academic knowledge production using both thematic and historical synthesis.*

ABOUT THIS EMPHASIS

Courses in the humanities are those that study the cultural activities and artistic expressions of human beings. Students will develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creations and develop aesthetic understanding, and an ability to make value judgments.

1. Follow the Career and Technical Education Pathway for associate degree in the MJC Catalog. Satisfactory completion of this pathway will result in an associate degree from Modesto Junior College.
2. In fulfillment of the Career and Technical Education Pathway degree requirements, select and complete a General Studies emphasis from the following pages. Coursework completed in fulfillment of a General Education requirement cannot be reapplied toward a General Studies emphasis.
3. For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines. Complete 6 units in each. Students may not double-count units with General Education courses.

REQUIRED COURSES - COMPLETE 18 UNITS

ANTHR 104	[NP]	Linguistic Anthropology	3
ART 102	[NP]	Intro to Computer Graphics	3
ART 120	[NP]	Basic Drawing 1	3
ART 124	[NP]	Color and 2-D Foundation Design	3
ART 140	[NP]	Sculpture 1	3
ART 151	[NP]	Survey of Islamic Art	3
ART 160	[NP]	Appreciation of Art	3
ART 162	[NP]	History of Renaissance Art	3
ART 163	[NP]	History of Modern Art	3
ART 164	[NP]	History of Art 1: Prehistoric to Gothic	3
ART 165	[NP]	History of Art 2: Renaissance to Contemporary	3
ART 168	[NP]	History of Photography	3
ART 169	[NP]	Survey of Asian Art	3
ART 170	[NP]	Basic Photography	3
CMPGR 202	[NP]	Intro to Computer Graphics	3
COMM 120	[NP]	Oral Interpretation	3
COMM 122	[NP]	Introduction to Readers' Theatre	3
COMM 123	[NP]	Storytelling	3
COMM 124	[NP]	Advanced Readers' Theatre	3
COMM 132	[NP]	Introduction to Mass Communication	3
DANCE 102	[NP]	Introduction to World Dance	3
ENGL 102	[NP]	Advanced Composition & Introduction to Literature	3
ENGL 105	[NP]	Creative Writing: Poetry	3
ENGL 106	[NP]	Creative Writing: Short Fiction	3
ENGL 111	[NP]	Creative Writing: Creative Nonfiction	3
ENGL 112	[NP]	Introduction to the Novel and Short Story	3
ENGL 114	[NP]	Introduction to Poetry	3
ENGL 116	[NP]	Introduction to Drama	3
ENGL 131	[NP]	Introduction to World Literature 1	3
ENGL 132	[NP]	Introduction to World Literature 2	3
ENGL 135	[NP]	Survey of American Literature to 1850	3
ENGL 136	[NP]	Survey of American Literature: 1850 to the Present	3
ENGL 137	[NP]	Survey of English Literature to the Late 18th Century	3
ENGL 138	[NP]	Survey of English Literature: Late Eighteenth Century to Present	3
ENGL 151	[NP]	Folklore	3
ENGL 156	[NP]	The Bible as Literature: The Hebrew Canon and Intertestamental Writ	3
ENGL 157	[NP]	The Bible as Literature: The New Testament	3
ENGL 161	[NP]	Film Appreciation	3
ENGL 162	[NP]	History of Cinema	3
ENGL 163	[NP]	Introduction to Shakespeare	3
ENGL 168	[NP]	Adolescent Literature	3
ENGL 169	[NP]	Children's Literature	3
ENGL 171	[NP]	Introduction to African-American Literature	3
ENGL 172	[NP]	Intro to Chicano/a Literature	3
ENGL 173	[NP]	Intro to Latin American Literature	3
ENGL 174	[NP]	Introduction to Modern Asian Literature	3
ENGL 175	[NP]	Introduction to Women's Literature	3
ENGL 179	[NP]	Intro to Native American Lit, Mythology, and the Oral Tradition	3
FREN 101	[NP]	French 1	5
FREN 102	[NP]	French 2	5
GERM 101	[NP]	German 1	5
GERM 102	[NP]	German 2	5
HIST 104	[NP]	Western Civilizations to 1650	3
HIST 105	[NP]	Western Civilization Since 1650	3
HIST 106	[NP]	World Civilization to the 16th Century	3
HIST 107	[NP]	World Civilization from the 16th Century	3
HUMAN 101	[NP]	Introduction to the Humanities	3
HUMAN 105	[NP]	Early Humanistic Traditions	3
HUMAN 106	[NP]	Humanities in the Modern World	3
HUMAN 110	[NP]	East Meets West	3
HUMAN 130	[NP]	Introduction to Western Religions	3
HUMAN 140	[NP]	Introduction to World Mythology	3

ITAL 101	[NP]	Italian 1	5
MUSG 101	[NP]	Music Appreciation	3
MUSG 102	[NP]	Introduction to World Music	3
MUSG 111	[NP]	Introduction to American Popular Music	3
MUSG 121	[NP]	History of Western Music 1	3
MUSG 122	[NP]	History of Western Music 2	3
MUST 101	[NP]	Music Fundamentals	3
MUST 121	[NP]	Music Theory 1	3
MUST 122	[NP]	Music Theory 2	3
MUST 123	[NP]	Music Theory 3	3
MUST 124	[NP]	Music Theory 4	3
PHILO 101	[NP]	Philosophy	3
PHILO 111	[NP]	Ethics: Theory and Application	3
PHILO 113	[NP]	Philosophy and Art	3
PHILO 115	[NP]	Religion: Philosophical and Comparative Inquiry	3
PHILO 120	[NP]	History of Philosophy: Ancient	3
PHILO 121	[NP]	History of Philosophy: Modern	3
PHILO 123	[NP]	Twentieth Century Philosophy	3
PHILO 130	[NP]	Political Philosophy	3
PHILO 135	[NP]	Environmental Ethics	3
PHILO 140	[NP]	Philosophy and Film	3
SIGN 125	[NP]	ASL: Beginning Communication With the Deaf	3
SIGN 126	[NP]	ASL: Intermediate Communication With the Deaf	3
SIGN 127	[NP]	ASL: Advanced Communication With the Deaf	3
SOCSC 105	[NP]	Women's Studies	3
SOCSC 154	[NP]	Movies with a Message	3
SPAN 51	[NP]	Introductory Spanish 1	3
SPAN 52	[NP]	Introductory Spanish 2	3
SPAN 101	[NP]	Spanish 1	5
SPAN 102	[NP]	Spanish 2	5
SPAN 103	[NP]	Spanish 3	4
SPAN 109	[NP]	Spanish for Spanish Speakers 1	5
SPAN 110	[NP]	Spanish for Spanish Speakers 2	5
SPAN 112	[NP]	Introduction to Chicano/a Literature	3
SPAN 173	[NP]	Survey of Latin American Literature	3
THETR 100	[NP]	Introduction to Theatre Arts	3
THETR 114	[NP]	Script Analysis	3
THETR 122	[NP]	Introduction to Readers' Theatre	3
THETR 123	[NP]	Storytelling	3
THETR 124	[NP]	Advanced Readers' Theatre	3
THETR 160	[NP]	Fundamentals of Acting	3
THETR 161	[NP]	Intermediate Acting	3

TOTAL UNITS IN EMPHASIS 18

A.A. DEGREE:
GENERAL STUDIES, EMPHASIS IN LANGUAGE & RATIONALITY

ABOUT THIS EMPHASIS

Courses in language and rationality are those that study English composition, communication, and analytical thinking. Students will develop the principles and applications of language toward logical thought, clear and precise expression, and critical evaluation of communication whatever symbol system the students use.

Follow the Career and Technical Education Pathway for associate degree in the MJC Catalog. Satisfactory completion of this pathway will result in an associate degree from Modesto Junior College.

In fulfillment of the Career and Technical Education Pathway degree requirements, select and complete a General Studies emphasis from the following pages. Coursework completed in fulfillment of a General Education requirement cannot be reapplied toward a General Studies emphasis.

For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines and complete 6 units in each discipline. Students may not double-count units with General Education course

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate awareness of the interactive nature of communication involving effective listening, reading, writing, and speaking.*
2. *Demonstrate critical thinking in the analysis and production of communication.*
3. *Demonstrate the ability to find, evaluate, and use information in a variety of formats.*

REQUIRED COURSES - COMPLETE 18 UNITS

AGEC 225	[NP]	Agriculture Computer Applications	3
BUSAD 210	[NP]	Business Communication	3
COMM 100	[NP]	Fundamentals of Public Speaking	3
COMM 102	[NP]	Introduction to Human Communication	3
COMM 104	[NP]	Argumentation	3
COMM 106	[NP]	Group & Organizational Communication	3
COMM 107	[NP]	Introduction to Debate	3
COMM 110	[NP]	Persuasion	3
COMM 132	[NP]	introduction to Mass Communication	3
COMM 133	[NP]	Mediated Communication	3
CSCI 200	[NP]	Technical Computer Literacy	3
CSCI 201	[NP]	General Computer Literacy	3
CSCI 203	[NP]	Symbolic Logic	3
CSCI 204	[NP]	Discrete Structures for Computer Science	3
CSCI 230	[NP]	Database Management Systems	3
CSCI 253	[NP]	Web Database Development	3
CSCI 270	[NP]	Introduction to Programming	3
CSCI 271	[NP]	Problem Solving and Programming 1	3
CSCI 272	[NP]	Problem Solving and Programming 2	3
CSCI 273	[NP]	Assembly Language Programming	3
CSCI 274	[NP]	Windows Programming With Visual Studio	3
ENGL 103	[NP]	Advanced Composition & Critical Thinking	3
LIBR 100	[NP]	Research Concepts and Practice	3
MATH 89	[NP]	Intermediate Algebra for Non-STEM Majors	4
MATH 90	[NP]	Intermediate Algebra for STEM Majors	5
MATH 101	[NP]	Mathematical Ideas and Applications	3
MATH 105	[NP]	Structure of Mathematics 1	3
MATH 106	[NP]	Structure of Mathematics 2	3
MATH 111	[NP]	Applied College Algebra	3
MATH 130	[NP]	Finite Mathematics	3
MATH 134	[NP]	Elementary Statistics	4
MATH 138	[NP]	Calculus for Business & Social Sciences	3
MATH 161	[NP]	Trigonometry	4
MATH 162	[NP]	Precalculus	4
MATH 171	[NP]	Calculus: First Course	4
MATH 172	[NP]	Calculus: Second Course	4
MATH 173	[NP]	Calculus: Third Course	4
MATH 174	[NP]	Introduction to Differential Equations & Linear Algebra	5
PHILO 103	[NP]	Symbolic Logic	3
PHILO 105	[NP]	Critical Reasoning and Analytic Writing	3
PHILO 107	[NP]	Philosophy of Science	3
READ 184	[NP]	Critical Reading	3
SOCIO 105	[NP]	Introduction to Statistics for the Social & Behavioral Sciences	3

TOTAL UNITS IN EMPHASIS 18

A.A. DEGREE: GENERAL STUDIES, EMPHASIS IN NATURAL SCIENCES

ABOUT THIS EMPHASIS

Courses in the natural sciences are those that examine the physical universe, its life forms, and its natural phenomena. Students will develop an appreciation and understanding of the scientific method and an understanding of the relationships between science and other human activities.

1. Follow the Career and Technical Education Pathway for associate degree in the MJC Catalog. Satisfactory completion of this pathway will result in an associate degree from Modesto Junior College.
2. Coursework completed in fulfillment of a General Education requirement cannot be reapplied toward this General Studies emphasis.
3. For this non-transfer emphasis, complete a minimum of 18 units from the list below according to either Concentration A or B. Students may not double-count units with General Education courses.
   - Concentration A: Of these 18 units, complete 6 units in each of two different disciplines or groups of disciplines* below.
   - Concentration B: Of these 18 units, complete 12 units in one discipline or group of disciplines* below.

*The following disciplines may be grouped together for the purpose of meeting Concentration A or B: Allied Health Sciences Group: BIO 101 OR 111 OR 116, CHEM 143, CHEM 144, PSYCH 103, and any courses listed below in ANAT, AP, MICRO, or PHYSO. Earth and Space Sciences Group: Any courses listed below in ASTRO, EASCI, GEOL, or METEO. Life Sciences Group: Any courses listed below in BIO, BOT, or ZOOL.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply the scientific method as a foundation for the natural sciences.*
2. *Describe evolution as it applies to life and/or the physical universe.*
3. *Describe the physical universe and/or its life forms and its natural phenomena.*
4. *Demonstrate the relationships between science and other human activities.*

PROGRAM REQUIREMENTS

For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines. Complete 6 units in each.

REQUIRED COURSES - COMPLETE 18 UNITS

ANAT 125	[NP]	Human Anatomy	4
ANSC 200	[NP]	Introduction to Animal Science	3
ANTHR 101	[NP]	Biological Anthropology	3
ANTHR 105	[NP]	Biological Anthropology Laboratory	1
AP 50	[NP]	Elementary Human Anatomy-Physiology	3
ASTRO 151	[NP]	Introduction to Astrophysics Lab	1
ASTRO 160	[NP]	Introduction to Modern Astronomy	3
BIO 50	[NP]	Basic Biology	3
BIO 101	[NP]	Biological Principles	4
BIO 111	[NP]	General Biology	4
BIO 114	[NP]	General Ecology	4
BIO 115	[NP]	Genetics, Evolution, and Society	3
BIO 116	[NP]	Biology: A Human Perspective	4
BIO 140	[NP]	Introduction to Marine Biology	4
BIO 145	[NP]	Introduction to Freshwater Biology	4
BOT 101	[NP]	General Botany	4
CHEM 101	[NP]	General Chemistry 1	5
CHEM 102	[NP]	General Chemistry 2	5
CHEM 112	[NP]	Organic Chemistry 1	5
CHEM 113	[NP]	Organic Chemistry 2	5
CHEM 122	[NP]	Structure & React: Organic Chem 1	4
CHEM 123	[NP]	Structure & React: Organic Chem 2	4
CHEM 142	[NP]	Pre-General Chemistry	3
CHEM 143	[NP]	Introductory College Chemistry	4
CHEM 144	[NP]	Fundamentals of Organic & Biochemistry	4
CHEM 150	[NP]	Exploring Our Chemical Environment	3
CHEM 164	[NP]	Introductory Chemistry Laboratory	2
EASCI 161	[NP]	Earth Science	4
EASCI 162	[NP]	Introduction to Oceanography	4
ELTEC 208	[NP]	Fundamentals of Electricity and Electronics	3
ENSCI 108	[NP]	Environmental Conservation	3
FDNTR 219	[NP]	Introduction to Nutrition Science	3
GEOG 101	[NP]	Physical Geography	3
GEOG 111	[NP]	Physical Geography, Lab	1
GEOL 160	[NP]	Introduction to Geology	3
GEOL 161	[NP]	Physical Geology	4
GEOL 165	[NP]	Geology of California	3
GEOL 166	[NP]	Historical Geology	4
METEO 161	[NP]	Introduction to Meteorology	4
MICRO 101	[NP]	Microbiology	4
MICRO 111	[NP]	Plagues of Humankind	3
NR 200	[NP]	Soils	3
PE 124	[NP]	Introduction to Kinesiology	3
PHSCI 52	[NP]	The Way Things Work	3
PHSCI 180	[NP]	Concept Phys Sci: A Hands-On Appr	4
PHYS 101	[NP]	General Physics: Mechanics	4
PHYS 102	[NP]	General Physics: Waves, Thermodynamics & Optics	4
PHYS 103	[NP]	General Physics: Electricity, Magnetism & Modern Physics	4
PHYS 142	[NP]	Mechanics, Heat & Waves	4
PHYS 143	[NP]	Electricity, Magnetism, Optics, Atomic and Nuclear Structure	4
PHYS 160	[NP]	Descriptive Introduction to Physics	3
PHYS 165	[NP]	Introductory Physics	4
PHYS 180	[NP]	Conceptual Physics: A Hands-on Approach	4
PHYSO 101	[NP]	Introductory Human Physiology	4
PHYSO 103	[NP]	Introduction to Neuroscience	3
PLSC 200	[NP]	Introduction to Plant Science	3
PLSC 230	[NP]	Fruit Science	3
PSYCH 103	[NP]	Introduction to Neuroscience	3
ZOOL 101	[NP]	General Zoology	4

TOTAL UNITS IN EMPHASIS 18

A.A. DEGREE:
GENERAL STUDIES, EMPHASIS IN SOCIAL & BEHAVIORAL SCIENCE

ABOUT THIS EMPHASIS

Courses in the social and behavioral sciences are those that focus on people as members of society. Courses will stimulate critical thinking about the ways people act and have acted in response to their societies and will promote appreciation of how societies and social subgroups operate.

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway which include completion of the requirements below

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe and demonstrate the methodology and approach employed in the study of Behavioral and Social Sciences.*
2. *Critically examine local, national, and global issues as they pertain to the study of Behavioral and Social Sciences.*

EMPHASIS REQUIREMENTS

For this non-transfer emphasis, complete a minimum of 18 units from the list below. Of that 18 units, select two disciplines and complete 6 units in each discipline. Students may not double-count units with General Education courses.

REQUIRED COURSES - COMPLETE 18 UNITS

ADJU 201	[NP]	Introduction to Administration of Justice	3
ADJU 202	[NP]	Principles/Procedures of Justice System	3
ADJU 203	[NP]	Concepts of Criminal Law	3
ADJU 217	[NP]	Substance Abuse	3
ADJU 235	[NP]	Introduction to Corrections	3
AGEC 210	[NP]	Elements of Agricultural Economics	3
AGGE 146	[NP]	Agriculture, Environment and Society	3
ANTHR 101	[NP]	Biological Anthropology	3
ANTHR 102	[NP]	Cultural Anthropology	3
ANTHR 104	[NP]	Linguistic Anthropology	3
ANTHR 130	[NP]	Archaeology and Cultural Prehistory	3
ANTHR 140	[NP]	Magic, Witchcraft, and Religion	3
ANTHR 150	[NP]	Native People of North America	3
BUSAD 240	[NP]	Principles of Management	3
CLDDV 103	[NP]	Child Growth and Development	3
CLDDV 109	[NP]	Child-Family-Community	3
CLDDV 160	[NP]	Introduction to Children with Special Needs	3
CLDDV 262	[NP]	Diversity in Educational Settings	3
COMM 103	[NP]	Interpersonal Communication	3
COMM 130	[NP]	Intercultural Communication	3
ECON 101	[NP]	Principles of Macroeconomics	3
ECON 102	[NP]	Principles of Microeconomics	3
ECON 115	[NP]	Economic History of the United States	3
ENSCI 110	[NP]	California Water	3
FAMLF 131	[NP]	Family Relationships	3
GEOG 102	[NP]	Cultural Geography	3
GEOG 104	[NP]	California Geography	3
GEOG 105	[NP]	Economic Geography	3
GEOG 110	[NP]	World Regional Geography	3
HE 112	[NP]	Introduction to Public Health	3
HE 115	[NP]	Drugs, Health, and Society	3
HIST 101	[NP]	History of the United States to 1877	3
HIST 102	[NP]	History of the United States Since 1865	3
HIST 104	[NP]	Western Civilization to 1650	3
HIST 105	[NP]	Western Civilization Since 1650	3
HIST 106	[NP]	World Civilization to the 16th Century	3
HIST 107	[NP]	World Civilization From the 16th Century	3
HIST 112	[NP]	20th Century America	3
HIST 113	[NP]	Social and Cultural History of the U. S. Prior to the 20th Cent	3
HIST 115	[NP]	Economic History of the United States	3
HIST 116	[NP]	Women in American History	3
HIST 119	[NP]	Social and Cultural History of 20th Century America	3
HIST 125	[NP]	History of Mexico	3
HIST 128	[NP]	The American West	3
HIST 129	[NP]	History of California	3
HIST 145	[NP]	History of Latin America	3
HIST 154	[NP]	African Americans Through the 19th Century	3
HIST 155	[NP]	African Americans in the 20th and 21st Centuries	3
HUMSR 101	[NP]	Introduction to Human Services	3
HUMSR 114	[NP]	Death and Dying	3
HUMSR 142	[NP]	Introduction to Psychosocial Rehabilitation	3
HUMSR 143	[NP]	Psychosocial Rehabilitation Practice	3
PHILO 130	[NP]	Political Philosophy	3
POLSC 101	[NP]	American Politics	3
POLSC 102	[NP]	The Constitution and the Rights of Persons	3
POLSC 110	[NP]	International Relations	3
POLSC 111	[NP]	War and Peace: From Lenin to Al Qaeda	3
POLSC 120	[NP]	California Politics and Problems	3
POLSC 130	[NP]	Political Theory	3
POLSC 131	[NP]	American Political Thought	3
POLSC 140	[NP]	Comparative Politics	3
POLSC 165	[NP]	Political Science Research Methods	3
POLSC 180	[NP]	Human Rights	3
PSYCH 51	[NP]	Psychology in Everyday Life	3
PSYCH 101	[NP]	General Psychology	3
PSYCH 102	[NP]	Research Methods	3
PSYCH 104	[NP]	Introduction to Social Psychology	3
PSYCH 105	[NP]	Abnormal Psychology	3
PSYCH 111	[NP]	Psychology of Gender	3
SOCIO 101	[NP]	Introduction to Sociology	3
SOCIO 102	[NP]	Social Problems in the United States	3
SOCIO 125	[NP]	Sociology of the Family	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3
SOCIO 154	[NP]	African-American Cultures and Communities	3
SOCIO 156	[NP]	Mexican Culture in the United States	3
SOCSC 105	[NP]	Women's Studies	3
SOCSC 110	[NP]	Introduction to Elementary Education	3

TOTAL UNITS IN EMPHASIS 18

Geography
PROGRAM
(209) 575-6129

A. A.-T DEGREE:
GEOGRAPHY

Geography is the study of spatial aspects of the physical environment, human activities, and the nature of their interactions. Geography draws upon theories from both the physical and social sciences. As physical scientists, geographers study earth processes and the resulting features; climate, soils, vegetation, tectonics, landforms and resources. As social scientists, geographers examine human behaviors and the patterns humans create through economics, religion, language, urbanization, folk and popular culture, and ethnic identities which are reflected in the landscape. Geography utilizes a regional approach to examine the interrelationships between the physical environment, economy, culture, politics and history of specific locations, such as California, Europe or Asia.

The Associate in Arts in Geography for Transfer (AA-T in Geography) degree is intended for students who plan to complete a bachelor's degree in Geography at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN GEOGRAPHY FOR TRANSFER (AA-T IN GEOGRAPHY) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

***Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Assess the relationship between humans and the environment.*
2. *Describe and analyze spatial patterns of geographic phenomena.*
3. *Describe geographical methodology as it pertains to spatial patterns and the application of the scientific method to global problems.*

PROGRAM REQUIREMENTS

To receive an Associate of Arts for Transfer Degree in Geography, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

REQUIRED CORE: 6 UNITS

GEOG 101	[1]	Physical Geography	3
GEOG 102	[2]	Cultural Geography	3

LIST A: SELECT TWO TO THREE (6-9 UNITS)

GEOG 104	[3]	California Geography	3
GEOG 110	[2]	World Regional Geography	3
GEOG 109	[4]	Introduction to Geographic Information Systems	3

LIST B: SELECT TWO (6 UNITS)

Any course from List A not already used			3
GEOG 105	[3]	Economic Geography	3
ECON 101	[NP]	Principles of Macroeconomics	3
ANTHR 102	[NP]	Cultural Anthropology	3

TOTAL UNITS IN A.A.-T. MAJOR 18-21

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	12
GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE UNITS)	12-17

TOTAL UNITS Required for the A.A.-T. Degree 60

Geology
PROGRAM
(209) 575-6173

A.S.-T DEGREE:
GEOLOGY

The Associate in Science in Geology for Transfer Degree includes lower division coursework that is required for transfer and which focuses on the mastery of the identification of earth materials and the use of geologic maps, stratigraphic sections, and remote sensing imagery, using these techniques to model real- world applications.

The Associate in Science in Geology for Transfer Degree is intended for students who plan to complete a bachelor's degree in Geology at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Identify the rock-forming minerals, ore minerals, igneous rocks, sedimentary rocks, and metamorphic rocks, utilizing the physical and chemical properties of each.*
2. *Analyze and interpret stratigraphic columns, geologic profiles, and geologic and topographic maps to determine the geological and structural history of a given region.*
3. *Analyze the geological hazards of a given region based on identification of the tectonic and erosional processes acting on the landscape.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN GEOLOGY FOR TRANSFER DEGREE:

1. *Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
   - *(A) The California State University-General Education-Breadth pattern (CSU GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.*
   - *(B) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.*
2. *Obtainment of a minimum grade point average of 2.0. All courses within the ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.*

REQUIRED CORE: COMPLETE 26 UNITS

GEOL 161	[NP]	Physical Geology	4
GEOL 166	[NP]	Historical Geology	4
CHEM 101	[NP]	General Chemistry 1	5
CHEM 102	[NP]	General Chemistry 2	5
MATH 171	[NP]	Calculus: First Course	4
MATH 172	[NP]	Calculus: Second Course	4

TOTAL UNITS IN A.S.-T MAJOR 26

Total Units That May Be Double-Counted	7
GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
Elective (CSU Transferable Units)	2-4

TOTAL UNITS REQUIRED FOR THE A.S.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for the Associate in Science in Geology for Transfer Degree.*

Gerontology
PROGRAM
(209) 575-6129

SKILLS RECOGNITION:
GERONTOLOGY

Completion of the Gerontology Program will provide the holder with the skills, knowledge, and education necessary to work with the elderly. It also provides training and growth opportunities for existing human service employees. In addition, this Skills Recognition Award in Gerontology will serve as another step in an educational and career ladder leading to a Human Services Skills Recognition Award, certificate and or degree. All course work will be applicable as electives and/or meet the requirements for the Human Services degrees at MJC.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Develop clinical assessments, progress notes, intakes, treatment plans, discharge summaries, and other client related data for the rapidly-growing aged population.*
2. *Conduct individual, family, and group counseling sessions.*
3. *Practice appropriate service coordination of community resources, and identify various forms of social support.*
4. *Provide client, family, and community education around the myriad issues encountered by the aged population.*
5. *Demonstrate appropriate documentation skills, and critical analysis of the social and personal issues that impact the elderly.*
6. *Uphold the professional standards, and ethical obligations of the human service professional.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award in Gerontology, the student must complete the following coursework. Each course must be completed with a C or better.

REQUIRED COURSES - COMPLETE 9 UNITS

ENGL 101	[NP]	Composition and Reading	3
HUMSR 104	[NP]	Aging in America	3
HUMSR 110	[NP]	Intro to Interviewing, Counseling	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 9

History
PROGRAM
(209) 575-6129

A.A.-T DEGREE:
HISTORY

The Associate in Arts in History for Transfer (A.A.-T in History) Degree includes lower division coursework that is required for transfer and will provide students with the opportunity to learn a valuable skills in critical thinking and writing as they explore a variety of historical topics in world and western civilizations and American history. The A.A.-T in History includes courses that explore world and U.S. history, political institutions, and social and cultural influences.

The Associate in Arts in History for Transfer (A.A.-T in History) Degree is intended for students who plan to complete a bachelor's degree in history at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon completion of this award, the student should be prepared to:

1. *Describe and explain the role of politics, economics, and cultural developments on societies around the world and through time.*
2. *Critically analyze historical events in order to write an interpretation of a specific historical topic.*
3. *Engage in public discourse about current issues impacting our nation with the knowledge of how the past has shaped these issues.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN HISTORY FOR TRANSFER (AA-T IN HISTORY) DEGREE:

1. *Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
   - *(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.*
   - *(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.*
2. *Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or a "P" (Pass).*

**ADTs also require that students must earn a C or better or "P" (Pass) in all courses required for the major or area of emphasis.*

REQUIRED COURSES – COMPLETE 6 UNITS

HIST 101	[NP]	History of the United States to 1877	3
HIST 102	[NP]	History of the United States Since 1865	3

LIST A - SELECT 2 (6 UNITS)

HIST 106	[NP]	World Civilization to the 16th Century	3 OR
HIST 104	[NP]	Western Civilization to 1650	3
HIST 107	[NP]	World Civilization From the 16th Century	3 OR
HIST 105	[NP]	Western Civilization Since 1650	3

LIST B - SELECT 1 COURSE FROM EACH AREA (6 UNITS) (INCLUDING COURSES FROM LIST A IF NOT USED ABOVE)

AREA 1

HIST 106	[NP]	World Civilization to the 16th Century	3
HIST 107	[NP]	World Civilization from the 16th Century	3 OR
HIST 125	[NP]	History of Mexico	3
HIST 145	[NP]	History of Latin America	3 OR
HIST 116	[NP]	Women in American History	3
HIST 154	[NP]	African Americans Through the 19th Century	3
HIST 155	[NP]	African Americans in the 20th and 21st Centuries	3
ANTHR 150	[NP]	People of North America	3

AREA 2

HIST 112	[NP]	20th Century America	3
HIST 113	[NP]	Social and Cultural History of the US prior to the 20th Century	3
HIST 115	[NP]	Economic History of the United States	3
HIST 116	[NP]	Women in American History	3
HIST 119	[NP]	Social and Cultural History of 20th Century America	3
HIST 125	[NP]	History of Mexico	3
HIST 128	[NP]	The American West	3
HIST 129	[NP]	History of California	3
HIST 145	[NP]	History of Latin America	3
HIST 154	[NP]	African Americans through the 19th Century	3
HIST 155	[NP]	African Americans in the 20th and 21st Centuries	3 OR
ANTHR 102	[NP]	Cultural Anthropology	3
GEOG 102	[NP]	Cultural Geography	3
GEOG 110	[NP]	World Regional Geography	3
PHILO 101	[NP]	Philosophy	3
PHILO 120	[NP]	History of Philosophy: Ancient	3
PHILO 121	[NP]	History of Philosophy: Modern	3
SOCSC 105	[NP]	Women's Studies	3

TOTAL UNITS IN THE A.A.-T MAJOR 18

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	18
GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE UNITS)	21-23

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

Human Resources
PROGRAM
(209) 575-6129

SKILLS RECOGNITION:
HUMAN RESOURCES

The Human Resources program is designed to deliver relevant skills for today's business workplace. This skills builder program provides: 1) skills enhancement for students in the business workforce; 2) a pathway for students to explore the Human Resources field; and 3) a specific business concentration for students who desire to transfer with an AS-T or AS in Business Administration. Courses cover Human Resource principles and practices of management and planning, recruitment and selection, compensation and benefits, employer/employee relations, and legal requirements in the field.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the Human Resources environment.*
2. *Identify and use common human resource practices.*
3. *Understand and apply human resource and business terminology.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES

OFADM 256	[1]	Introduction to Word Processing	1
OFADM 259	[1]	Introduction to Spreadsheet Software	1
OFADM 316	[1]	Introduction to Microsoft Outlook	1
BUSAD 377	[1]	Human Relations in Business	3
BUSAD 274	[2]	Human Resources Management	3
BUSAD 319	[2]	Payroll Accounting	3

TOTAL UNITS IN SKILLS RECOGNITION AWARD 12

Human Services
PROGRAM
(209) 575-6129

A.A. DEGREE:
HUMAN SERVICES

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate an understanding of the Human Services, delivery systems, and application of the code of ethics as it relates to the Human Service profession.*
2. *Exhibit effective, communication, body language, and written abilities.*
3. *Demonstrate an understanding of theoretical orientations, social problems, and the relation to clinical or group practice with individuals, families, groups, communities, and organizations.*
4. *Comprehend the wide range of Human Service employment options, historical perspectives, and the populations served.*
5. *Conduct an elementary assessment, interview, intervention, referral, individual counseling, and group session.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 17 UNITS

HUMSR 101	[1]	Introduction to Human Services	3
HUMSR 110	[2]	Intro to Interviewing, Counseling	3
HUMSR 114	[NP]	Death and Dying	3
HUMSR 144	[NP]	Human Services Practicum	1
HUMSR 145ABD	[NP]	Community Agency Practicum	1,2,4
HUMSR 116	[1]	Drugs and Alcohol in Society	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3 OR
SOCIO 156	[NP]	Mexican Culture in the United States	3

ELECTIVE COURSES - COMPLETE 3 UNITS

ANTHR 102	[2]	Cultural Anthropology	3
HUMSR 103	[NP]	Introduction to Human Services Careers	0.5
HUMSR 113	[NP]	Co-Occurring Disorders	3
HUMSR 119	[NP]	Intro Grp Ldrshp/Grp Process	3
HUMSR 120	[NP]	Professional Devt. in the Helping Professions	3
POLSC 120	[4]	California Politics and Problems	3
PSYCH 51	[1]	Psychology in Everyday Life	3 OR
PSYCH 101	[1]	General Psychology	3
PSYCH 104	[3]	Introduction to Social Psychology	3
PSYCH 110	[2]	Human Sexualities	3
SOCIO 101	[1]	Introduction to Sociology	3
SOCIO 125	[3]	Sociology of the Family	3

TOTAL UNITS IN A.A. MAJOR 20

CERTIFICATE OF ACHIEVEMENT: **HUMAN SERVICES**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate an understanding of the Human Services, delivery systems, and application of the code of ethics as it relates to the Human Service profession.*
2. *Exhibit effective, communication, body language, and written abilities.*
3. *Demonstrate an understanding of theoretical orientations, social problems, and the relation to clinical or group practice with individuals, families, groups, communities, and organizations.*
4. *Comprehend the wide range of Human Service employment options, historical perspectives,and the populations served.*
5. *Conduct an elementary assessment, interview, intervention, referral, individual counseling, and group session.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 27 UNITS

HUMSR 103	[1]	Introduction to Human Services Careers	0.5
GUIDE 110	[1]	Introduction to College	0.5
HUMSR 101	[1]	Introduction to Human Services	3
HUMSR 110	[1]	Intro to Interviewing, Counseling	3
SOCIO 102	[1]	Social Problems in the United States	3
HUMSR 116	[1]	Drugs and Alcohol in Society	3
HUMSR 120	[2]	Professional Development in the Helping Professions	3
SOCIO 150	[2]	Ethnicity and Culture in America	3 OR
SOCIO 156	[2]	Mexican Culture in the United States	3
SOCIO 125	[2]	Sociology of the Family	3
HUMSR 144	[NP]	Human Services Practicum	1
HUMSR 145ABD	[NP]	Community Agency Practicum	1,2,4
PSYCH 110	[2]	Human Sexualities	3 OR
PSYCH 130	[2]	Personal Adjustment	3 OR
PSYCH 141	[2]	Human Lifespan Development	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 27

Humanities
PROGRAM
(209) 575-6081

A.A. DEGREE:
HUMANITIES

ABOUT THIS EMPHASIS

This A.A. is designed as a University Preparation, Emphasis in Humanities. The University Preparation degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. The humanities include, but are not limited to, the history, theory, comparison, and criticism of a broad range of subjects in the liberal arts, including pictorial, plastic, musical, and performance arts; literature; philosophy; foreign languages and cultures; mythology and comparative religion; and those aspects of the social sciences (such as history and cultural anthropology) that use historical and interpretive rather than quantitative methods of inquiry. The humanities enable us to reflect upon our lives and ask fundamental questions of value, purpose, and meaning in a rigorous and systematic way.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe how cultural beliefs, values and practices have influenced societies in various times*
2. *Analyze the ways that individuals and various cultural groups act in response to their societies and environment.*
3. *Demonstrate awareness of the various ways that culture, ethics, history, belief, and ethnicity affect individual experience and society as a whole.*
4. *Demonstrate the ability to interpret and analyze works of art for meaning and to forge aesthetic judgments.*
5. *Demonstrate critical thinking in the analysis of cultural production using both thematic and historical synthesis.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree with this emphasis, the student must complete the requirements detailed in the University Preparation Pathway in the MJC Catalog which include completion of the requirements below. See advisor for selection of courses.

REQUIRED COURSES - COMPLETE 9 UNITS

HUMAN 105	[NP]	Early Humanistic Traditions	3
HUMAN 106	[NP]	Humanities in the Modern World	3
HUMAN 101	[NP]	Introduction to the Humanities	3
HUMAN 110	[NP]	East Meets West	3
HUMAN 130	[NP]	Introduction to Western Religions	3
HUMAN 140	[NP]	Introduction to World Mythology	3
HUMAN 196	[NP]	Humanities Special Topics: Social Justice	3 OR
HUMAN 197	[NP]	Humanities Special Topics: Nature and Civilization	3 OR
HUMAN 198	[NP]	Humanities Special Topics: Place and Identity	3

ELECTIVE COURSES - COMPLETE 9 UNITS

ELECTIVE COURSES GROUP 1 - TAKE ONE COURSE FROM THE FOLLOWING

ENGL 116	[NP]	Introduction to Drama	3
ENGL 131	[NP]	Introduction to World Literature 1	3
ENGL 132	[NP]	Introduction to World Literature 2	3
ENGL 135	[NP]	Survey of American Literature to 1850	3
ENGL 136	[NP]	Survey of American Literature: 1850 to the Present	3
ENGL 137	[NP]	Survey of English Literature to the Late 18th Century	3
ENGL 138	[NP]	Survey of English Literature: Late 18th Century To Present	3
FREN 101	[NP]	French 1	5
GERM 101	[NP]	German 1	5
ITAL 101	[NP]	Italian 1	5
SPAN 101	[NP]	Spanish 1	5

ELECTIVE COURSES GROUP 2 - TAKE ONE COURSE FROM THE FOLLOWING

ANTHR 102	[NP]	Cultural Anthropology	3
HUMAN 101	[NP]	Introduction to the Humanities	3
HUMAN 110	[NP]	East Meets West	3
HUMAN 130	[NP]	Introduction to Western Religions	3
HUMAN 140	[NP]	Introduction to World Mythology	3
PHILO 111	[NP]	Ethics: Theory and Application	3
PHILO 120	[NP]	History of Philosophy: Ancient	3
PHILO 121	[NP]	History of Philosophy: Modern	3
PHILO 123	[NP]	Twentieth Century Philosophy	3

ELECTIVE COURSES GROUP 3 - TAKE ONE COURSE FROM THE FOLLOWING

ART 164	[NP]	History of Art 1: Prehistoric	3
ART 165	[NP]	History of Art 2: Renaissance to Contemporary	3
ART 169	[NP]	Survey of Asian Art	3
COMM 123	[NP]	Storytelling	3
DANCE 102	[NP]	Introduction to World Dance	3
HIST 104	[NP]	Western Civilization to 1650	3
HIST 105	[NP]	Western Civilization Since 1650	3
MUSG 102	[NP]	Introduction to World Music	3
MUSG 121	[NP]	History of Western Music 1	3
MUSG 122	[NP]	History of Western Music 2	3

TOTAL UNITS IN A.A. MAJOR ..... 18 – 20

International Business
PROGRAM
(209) 575-6129

CERTIFICATE OF ACHIEVEMENT: **INTERNATIONAL BUSINESS**

The International Business Certificate of Achievement is designed for students seeking an entrepreneurial or organizational career in global commerce. It may be obtained as an individual certificate or incorporated into other appropriate majors. Courses are designed to provide an essential understanding of both domestic and international business practices. Economic and cultural and ethical considerations are addressed in relation to business of all sizes and types.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe economic, cultural, and ethical differences in conducting business.*
2. *Gain employment in an organization or pursue entrepreneurial aspirations in global commerce.*
3. *Explain domestic and international business practices.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in International Business, the student must complete the coursework as indicated below. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 17 UNITS

BUSAD 201	[1]	Financial Accounting	4
BUSAD 208	[1]	Introduction to International Business	3
BUSAD 209	[2]	Import/Export Fundamentals	3
BUSAD 218	[2]	Business Law	4
BUSAD 240	[1]	Principles of Management	3 OR
BUSAD 248	[1]	Introduction to Business	3 OR
CSCI 201	[2]	General Computer Literacy	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 17

Language Studies
PROGRAM
(209) 575-6159

A.A. DEGREE:
LANGUAGE STUDIES

This A.A. is designed as a University Preparation, Emphasis in Language Studies. The University Preparation degree, distinctive of the University Preparation "pathway," is designed to prepare you for transfer to a California State University (CSU) or University of California (UC) campus. While completion of this program does not guarantee admission to a specific college or university, it allows you to complete preparatory courses that may apply toward the area of study in which you plan to major at your targeted transfer university, and to complete general education requirements required by CSU and UC for bachelor's (baccalaureate) degree. It entails an interdisciplinary approach to learning that will allow you to simultaneously meet your unique transfer goals and fulfill lower division requirements for bachelor's degree at many CSU or UC institutions. You will do this by completing a rigorous general education experience with either the CSU-GE or IGETC general education patterns, in addition to completing an emphasis in a particular field or program. How does it work? Each emphasis has been crafted to help you prepare for upper-division coursework in a baccalaureate major at a four-year university. By fulfilling the requirements of the MJC emphasis, you will also be completing some or all lower-division preparation for baccalaureate major at the university. ASSIST (www.assist.org) is a statewide database of recorded transfer agreements between community colleges and universities. You are advised to use ASSIST in selecting courses from the emphasis to ensure that the coursework applies to your baccalaureate major. University Preparation with Emphasis Prepare for transfer with some majors at MJC. Not every program at MJC offers a degree designed for transfer-oriented students. However, many programs do offer AA or AS majors which function like the emphasis for transfer-oriented students. Those majors are included on the following pages to help you make the right decision when determining the best transfer-oriented path of study.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Converse in at least two languages.*
2. *Communicate in writing in at least two languages.*
3. *Read critically, interpret analytically, and write coherently in at least two languages.*
4. *Understand and demonstrate appreciation of cultural differences.*

EMPHASIS REQUIREMENTS

To earn an Associate Degree in this major, the student must complete the requirements detailed in the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 3 UNITS

ENGL 103	[NP]	Advanced Composition and Critical Thinking	3

COMPLETE 14 UNITS IN ONE OR TWO LANGUAGES FROM THE FOLLOWING LIST:

FREN 101	[NP]	French 1	5
FREN 102	[NP]	French 2	5
GERM 101	[NP]	German 1	5
GERM 102	[NP]	German 2	5
ITAL 101	[NP]	Italian 1	5
SIGN 125	[NP]	ASL: Beginning Communication With the Deaf	3
SIGN 126	[NP]	ASL Intermediate Communication With the Deaf	3
SIGN 127	[NP]	ASL Advanced Communication With the Deaf	3
SPAN 101	[NP]	Spanish 1	5
SPAN 102	[NP]	Spanish 2	5
SPAN 103	[NP]	Spanish 3	4
SPAN 109	[NP]	Spanish for Spanish Speakers 1	5
SPAN 110	[NP]	Spanish for Spanish Speakers 2	5

ELECTIVE COURSES - COMPLETE 3 UNITS

ENGL 102	[NP]	Advanced Composition & Introduction to Literature	3
ENGL 131	[NP]	Introduction to World Literature 1	3
ENGL 132	[NP]	Introduction to World Literature 2	3
ENGL 172	[NP]	Intro to Chicano/a Literature	3
ENGL 175	[NP]	Introduction to Women's Literature	3
ENGL 179	[NP]	Intro to Native American Lit, Mythology, and Oral Tradition	3
SPAN 112	[NP]	Introduction to Chicano/a Literature	3
SPAN 173	[NP]	Survey of Latin American Literature	3
COMM 130	[NP]	Intercultural Communication	3

TOTAL UNITS IN A.A. MAJOR 20

Logistics and Supply Chain Management

PROGRAM
(209) 575-6332

The Logistics and Supply Chain Management Program is designed to prepare students for entry level jobs in warehouse operations, inventory control, distribution center operations, transportation operations, production operations, procurement or customer service. Successful students will receive a vocational education that will provide the foundation for jobs such as warehouse clerk, distribution clerk, inventory clerk, logistics clerk, purchasing clerk, production scheduler or customer representative.

A.S. DEGREE:
LOGISTICS AND SUPPLY CHAIN MANAGEMENT

The A.S. in Logistics and Supply Chain Management offers students a comprehensive general logistics and supply chain foundation for entry level professional jobs in warehouse operations, distribution center operations, inventory control, transportation operations, purchasing, customer service or import/export operations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Describe key logistics and supply chain functions, processes and technologies.*
2. *Apply essential logistics and supply chain concepts.*
3. *Demonstrate knowledge and skills to work successfully in an entry level professional job in the logistics and supply chain industry.*
4. *Think critically across supply chain functional areas to solve operations problems.*
5. *Use key supply chain information systems and apply technology to analyze supply chain problems.*
6. *Apply effective team working skills.*

PROGRAM REQUIREMENTS

To earn an A.S. degree in Logistics and Supply Chain Management, the student must complete the requirements detailed in the Career Technical Education Pathway or University Preparation Pathway which include completion of all required courses and three of the elective courses.

REQUIRED COURSES: COMPLETE 22 UNITS

OFADM 256	[1]	Introduction to Word Processing	1
OFADM 259	[1]	Introduction to Spreadsheet Software	1
OFADM 261	[1]	Introduction to Databases	1
OFADM 262	[1]	Introduction to Business Presentation Software	1
LOGST 201	[1]	Operations Management and Lean Principles	3
LOGST 202	[1]	Introduction to Supply Chain Management	3
LOGST 203	[1]	Introduction to Transportation Management	3
LOGST 205	[1]	Introduction to Warehouse Management	3
LOGST 206	[2]	Introduction to Purchasing and Contracting	3
LOGST 207	[2]	Introduction to Customer Service	3

ELECTIVE COURSES: COMPLETE THREE COURSES

BUSAD 201	[2]	Financial Accounting	4
BUSAD 202	[2]	Managerial Accounting	4
BUSAD 209	[2]	Import/Export Fundamentals	3
BUSAD 210	[2]	Business Communication	3
BUSAD 218	[2]	Business Law	4
BUSAD 248	[2]	Introduction to Business	3
BUSAD 351	[1]	Elements of Supervision	3
ECON 101	[2]	Principles of Macroeconomic	3
ECON 102	[2]	Principles of Microeconomics	3
LOGST 299D	[2]	Logistics Internship	4
OFADM 313	[2]	Office Skills	3

TOTAL UNITS IN A.S. MAJOR 31– 34

CERTIFICATE OF ACHIEVEMENT: **LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

The two-semester advanced certificate program is designed to provide students a comprehensive general logistics and supply chain foundation for entry level professional jobs in warehouse operations, distribution center operations, inventory control, transportation operations, purchasing, and customer service or import/export operations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to:

1. *Describe key logistics and supply chain functions and processes.*
2. *Apply essential logistics and supply chain concepts.*
3. *Demonstrate knowledge and skills to work successfully in an entry level professional job in the logistics and supply chain industry.*
4. *Think critically across supply chain functional areas to solve operations problems.*
5. *Use key supply chain information systems and apply technology to analyze supply chain problems.*
6. *Apply effective team working skills.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement in Logistics and Supply Chain Management, the student must complete all required courses plus two of the elective courses

REQUIRED COURSES: COMPLETE 22 UNITS

OFADM 256	[1]	Introduction to Word Processing	1
OFADM 259	[1]	Introduction to Spreadsheet Software	1
OFADM 261	[1]	Introduction to Database	1
OFADM 262	[1]	Introduction to Business Presentation Software	1
LOGST 201	[1]	Operations Management and Lean Principles	3
LOGST 202	[1]	Introduction to Supply Chain Management	3
LOGST 203	[1]	Introduction to Transportation Management	3
LOGST 205	[1]	Introduction to Warehouse Management	3
LOGST 206	[2]	Introduction to Purchasing and Contracting	3
LOGST 207	[2]	Introduction to Customer Service	3

ELECTIVE COURSES: COMPLETE TWO COURSES

BUSAD 201	[2]	Financial Accounting	4
BUSAD 202	[2]	Managerial Accounting	4
BUSAD 208	[2]	Introduction to International Business	3
BUSAD 209	[2]	Import/Export Fundamentals	3
BUSAD 218	[2]	Business Law	4
BUSAD 248	[2]	Introduction to Business	3
BUSAD 351	[1]	Elements of Supervision	3
LOGST 299D	[2]	Logistics Internship	4
OFADM 313	[2]	Office Skills	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD ..... 28 – 30

SKILLS RECOGNITION: **LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

The one-semester skills recognition is designed to provide students a basic logistics and supply chain management foundation for entry level professional jobs in warehouse operations, distribution center operations, inventory control, transportation operations, purchasing, customer service or import/export operations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe key logistics and supply chain functions and processes.*
2. *Apply essential logistics and supply chain concepts.*
3. *Demonstrate essential knowledge and skills to work successfully in an entry level professional job in the logistics and supply chain industry.*
4. *Apply fundamental team working skills.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete all required coursework. Each course must be completed with a "C" or better.

REQUIRED COURSES - COMPLETE THREE COURSES

LOGST 200	[NP]	Introduction to Logistics	3
LOGST 201	[NP]	Operations Management and Lean Principles	3
LOGST 202	[NP]	Introduction to Supply Chain Management	3

ELECTIVE COURSES - COMPLETE TWO COURSES

BUSAD 208	[NP]	Introduction to International Business	3
BUSAD 209	[NP]	Import/Export Fundamentals	3
LOGST 203	[NP]	Introduction to Transportation Management	3
LOGST 205	[NP]	Introduction to Warehouse Management	3
LOGST 206	[NP]	Introduction to Purchasing and Contracting	3
LOGST 207	[NP]	Introduction to Customer Service	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 15

SKILLS RECOGNITION AWARD:
LOGISTICS ASSOCIATE

The 16-week Logistics Associate Skills Recognition Award is designed to train students in logistics and supply chain operations for entry level associate positions in warehousing, distribution, transportation or production. The program consists of a comprehensive behind-the-wheel forklift driver training as well as a rigorous APICS coursework in logistics and supply chain. Students will have the opportunity to obtain APICS' internationally recognized Global Logistics Associate (GLA) certification after successful completion of a comprehensive exam.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Drive/operate various materials handling equipment safely.*
2. *Apply basic logistics and supply chain management concepts.*
3. *Demonstrate compliance with current OSHA safety requirements.*
4. *Demonstrate necessary skills to obtain entry level logistics associate position.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a C or better.

REQUIRED COURSES - COMPLETE 7 UNITS

LOGST 300	[1]	Global Logistics Associate Training	3
LOGST 301	[1]	Lift Truck Operations and Safety Training	2
LOGST 299B	[1]	Logistics Internship	2

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 7

Machine Tool Technology
PROGRAM
(209) 575-6332

The Machine Tool Technology Program is designed to provide training in the operation of traditional manual as well as computer operated machine tools used to produce the mechanical components used in all industrial applications. Students will receive instruction the use of lathes, milling machines, precision grinders as well as the theory and practice of precision dimensional measurement.

A.S. DEGREE:
MACHINE TOOL TECHNOLOGY

The Machine Tool Technology Program is designed to provide training on manual and computer operated machine tools (CNC). Students will receive instruction on the theory and practice of turning, milling and the use of precision measuring equipment.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current machine shop safety and environmental regulations.*
2. *Demonstrate effective operation of manual and CNC equipment in accordance with industry recognized and accepted practices.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the 26-30 required units, 3 elective units, and meet the MJC general education requirements. The classes within this series are intended to address the needs of those who wish to obtain an AS Degree in Machine Tool Technology.

REQUIRED COURSES - COMPLETE 26-30 UNITS

MACH 200DE	[1]	Introduction to Manual Machining	4 - 5
MACH 357	[1, 2]	Machine Trades Print Reading	2
MACH 205	[1, 2]	Intro to CNC Machining	2
MACH 201CD	[2]	Manual Machining 2	3 - 4
MACH 202CD	[3]	Manual Machining 3	3 - 4
MACH 206	[3, 2]	CNC Lathe Programming	3
MACH 207	[3, 4]	CNC Mill Programming	3
MACH 208	[3, 4]	Computer Aided Manufacturing	2
MACH 395AB	[3, 4]	Advanced Mach Tool Technology Lab	1 - 2
WELD 200	[NP]	Arc & Gas Welding	3

ELECTIVE COURSES - COMPLETE 3 UNITS:

MACH 209	[4]	Advanced CNC Machine Operations	3
WELD 206	[NP]	Gas Tungsten Arc Welding (G.T.A.W.)	3

TOTAL UNITS IN A.S. MAJOR 29-33

CERTIFICATE OF ACHIEVEMENT: **MACHINE TOOL TECHNOLOGY**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current machine shop safety and environmental regulations.*
2. *Demonstrate effective operation of manual and CNC equipment in accordance with industry recognized and accepted practices.*

PROGRAM REQUIREMENTS

To earn this Certificate of Achievement Award, students must complete the 29-33 required units. Each course must be completed with a C or better. This series of courses is intended to provide students with a focused study of machine tool technology.

REQUIRED COURSES – COMPLETE A MINIMUM OF 26-30 UNITS

MACH 200DE	[1]	Introduction to Manual Machining	4 - 5
MACH 357	[1, 2]	Machine Trades Print Reading	2
MACH 205	[1, 2]	Intro to CNC Machining	2
MACH 201CD	[2]	Manual Machining 2	3 - 4
MACH 202CD	[3]	Manual Machining 3	3 - 4
MACH 206	[2, 3]	CNC Lathe Programming	3
MACH 207	[3, 4]	CNC Mill Programming	3
MACH 208	[3, 4]	Computer Aided Manufacturing	2
MACH 395AB	[3, 4]	Advanced Mach Tool Technology Lab	1 - 2
WELD 200	[NP]	Arc & Gas Welding	3

ELECTIVE COURSES - COMPLETE 3 UNITS:

MACH 209	[4]	Advanced CNC Machine Operations	3
WELD 206	[NP]	Gas Tungsten Arc Welding (G.T.A.W.)	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....29-33

CERTIFICATE OF ACHIEVEMENT: **MAINTENANCE MACHINIST**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current machine shop safety and environmental regulations.*
2. *Perform manual machine shop operations in accordance with industry recognized and accepted practices.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement the student must complete 18-20 units from the areas indicated. This series of courses is intended to prepare students for careers in maintenance with a focus in machining.

REQUIRED COURSES – COMPLETE 18-20 UNITS

MACH 200E	[1,2]	Introduction to Manual Machining	5
MACH 205	[1, 2]	Intro to CNC Machining	2
MACH 357	[1, 2]	Machine Trades Print Reading	2
MACH 201CD	[4]	Manual Machining 2	3 - 4
MACH 202CD	[3]	Manual Machining 3	3 - 4
WELD 200	[2, 3]	Arc & Gas Welding	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 18-20

SKILLS RECOGNITION: **BASIC MACHINING (Formerly listed as CNC Operator)**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with basic machining safety and environmental regulations.*
2. *Perform entry-level machining operations in accordance with industry recognized and accepted practices.*

PROGRAM REQUIREMENTS

To earn this Skills Recognition Award, the student must complete the 11-12 required units. This series of courses is intended to give students entry-level skills to be able to operate lathes and milling machines that are commonly used in manufacturing applications.

REQUIRED COURSES

MACH 200DE	[1, 2]	Introduction to Manual Machining	4 - 5
MACH 205	[1, 2]	Intro to CNC Machining	2
MACH 357	[1, 2]	Machine Trades Print Reading	2
WELD 200	[1, 2	Arc & Gas Welding	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 11-12

SKILLS RECOGNITION: **CNC MACHINIST (Formerly listed as CNC Programmer)**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Manually format and produce G&M Code Program for a CNC Lathe or Mill.*
2. *Setup and operate a CNC Lathe or Mill.*

PROGRAM REQUIREMENTS

To earn this Skills Recognition Award, the student must complete the 16-17 required units. This series of courses is intended to give students sufficient skill base to setup, operate and edit programs for CNC Machines.

REQUIRED COURSES – COMPLETE 14 UNITS

MACH 200D	[1]	Introduction to Manual Machining	4
MACH 357	[1, 2]	Machine Trades Print Reading	2
MACH 205	[1, 2]	Intro to CNC Machining	2
MACH 206	[2, 3]	CNC Lathe Programming	3
MACH 207	[2, 3]	CNC Mill Programming	3

Elective Courses - COMPLETE 2-3 UNITS

MACH 208	[3, 4]	Computer Aided Manufacturing	2
MACH 209	[3, 4]	Advanced CNC Machine Operations	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD.....16-17

SKILLS RECOGNITION:
MAINTENANCE OPERATOR

(Formerly listed as Maintenance Machinist 1)

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current industrial safety and environmental regulations.*
2. *Operate common machinery in an industrial environment in accordance with industry recognized and accepted practices.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, student must complete the 17 units. This series of courses prepares students for career opportunities as machine and/or line operators.

REQUIRED COURSES – COMPLETE 17 UNITS

MACH 200D	[1]	Introduction to Manual Machining	4
MACH 201C	[2]	Manual Machining 2	3
MACH 205	[1, 2]	Intro to CNC Machining	2
MACH 357	[1, 2]	Machine Trades Print Reading	2
WELD 200	[1, 2]	Arc & Gas Welding	3
ELTEC 223	[1, 2]	Industrial Electrical Components and Control Devices	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 17

Marketing
PROGRAM
(209) 575-6129

A.S. DEGREE:
MARKETING

The Marketing Program is designed for those students interested in activities relating to the presentation, purchase, and distribution of goods and services in profit and nonprofit organizations. Students will learn the central role that marketing plays in organizations of every size and type, public and private.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the marketing environment.*
2. *Apply communication strategies for various audiences and contexts.*
3. *Apply fundamental sales and marketing techniques.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the MJC Associate Degree Requirements in addition to the following coursework. Degrees are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All Required Courses must be passed with a "C" grade or better. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES - COMPLETE 18 UNITS

BUSAD 210	[3]	Business Communication	3
BUSAD 240	[1]	Principles of Management	3
BUSAD 245	[1]	Principles of Marketing	3
BUSAD 358	[2]	Advertising & Sales Promotion	3
CMPGR 215	[2]	Business Presentation Graphics	3
CSCI 201	[1]	General Computer Literacy	3

ELECTIVE COURSES - COMPLETE 9-12 UNITS

BUSAD 310	[1]	Bookkeeping 1	3 OR
BUSAD 201	[2]	Financial Accounting	4
BUSAD 218	[3]	Business Law	4
BUSAD 200	[2, 3]	Spreadsheet Skills for Financial Accounting	2 OR
OFADM 259	[2]	Introduction to Spreadsheet Software	1 OR
CSCI 223	[2]	Spreadsheet Software	3
BUSAD 230	[2]	Personal Finance	3
BUSAD 248	[2]	Introduction to Business	3
BUSAD 274	[2]	Human Resources Management	3 OR
BUSAD 377	[2]	Human Relations in Business	3
BUSAD 208	[2,1]	Introduction to International Business	3
BUSAD 209	[1, 2]	Import/Export Fundamentals	3
BUSAD 364	[1, 2]	Total Quality Management	3

TOTAL UNITS IN A.S. MAJOR 27-30

Mathematics
PROGRAM
(209) 575-6173

A.S.-T DEGREE: MATHEMATICS

The Associate in Science in Mathematics for Transfer Degree includes curriculum which focuses on the mastery of integration and differentiation and using these techniques to model real-world applications. The Associate in Science in Mathematics for Transfer Degree is intended for students who plan to complete a bachelor's degree in Mathematics or a related field of study offered at various campuses in the California State University system. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. The Associate in Science in Mathematics for Transfer Degree also offers the appropriate preparation for students who plan to complete a bachelor's degree in Mathematics at various campuses in the University of California system. However, students completing this degree are not guaranteed admission to the UC system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN MATHEMATICS FOR TRANSFER (AS-T IN MATHEMATICS) DEGREE:

1. *Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
   - *(A) The California State University-General Education-Breadth pattern (CSU GE Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.*
   - *(B) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.*
2. *Obtainment of a minimum grade point average of 2.0. All courses within the ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.*

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Successfully complete upper division coursework in mathematics.*
2. *Master the techniques of integration and differentiation.*
3. *Use these techniques to model real-world applications.*

PROGRAM REQUIREMENTS

To earn an Associate in Science for Transfer Degree in this major, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway.

REQUIRED COURSES - COMPLETE 12 UNITS:

MATH 171	[1]	Calculus: First Course	4
MATH 172	[2]	Calculus: Second Course	4
MATH 173	[3]	Calculus: Third Course	4

SELECT 6 UNITS MINIMUM FROM THE LISTS BELOW WITH AT LEAST 3 UNITS FROM LIST A:

LIST A:

MATH 174	[4]	Introduction to Differential Equations & Linear Algebra	5

LIST B: SELECT ONE

PHYS 101	[NP]	General Physics: Mechanics	4
CSCI 271	[NP]	Problem Solving and Programming 1	3
MATH 134	[NP]	Elementary Statistics	4

TOTAL UNITS IN A.S.-T MAJOR 20-21

TOTAL UNITS THAT MAY BE DOUBLE COUNTED	3-7
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVES (CSU TRANSFERABLE UNITS)	3-9

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE..... 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities Requirement is not required for the Associate in Science in Mathematics for Transfer Degree.*

Mathematics
NON-CREDIT PROGRAM
(209) 575-6173

CERTIFICATE OF COMPETENCY: PROFICIENCY IN ARITHMETIC

A noncredit Certificate of Competency: Proficiency in Arithmetic. This sequence of noncredit basic arithmetic courses is designed to prepare students for higher level courses by providing students with a foundation in arithmetic. Completion of this certificate also benefits students in other programs or careers where knowledge of fundamental arithmetic concepts is essential for success.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Analyze and solve level appropriate problems involving whole number, fraction, percent, and decimal arithmetic.*
2. *Effectively communicate, using appropriate mathematical notation, processes and strategies in solving level appropriate problems involving whole number, fraction, percent, and decimal arithmetic.*

PROGRAM REQUIREMENTS

In order to earn a Certificate of Competency students need to successfully complete the sequence of courses listed below.

REQUIRED COURSES: ALL NON-CREDIT

MATH 911	[1]	Whole Numbers	0
MATH 912	[1]	Fractions	0
MATH 913	[1]	Decimals and Percents	0

TOTAL UNITS REQUIRED IN CERTIFICATE OF COMPETENCY..... 0

CERTIFICATE OF COMPETENCY: **PROFICIENCY IN PRE-ALGEBRA**

A noncredit Certificate of Competency: Proficiency in Pre-Algebra. This sequence of noncredit basic pre-algebra courses is designed to prepare students for higher level courses by providing students with a foundation in pre-algebra. Completion of this certificate also benefits students in other programs or careers where knowledge of fundamental pre-algebra concepts is essential for success.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Analyze and solve level appropriate problems including arithmetic operations, simplifying expressions, solving equations, geometry, and applications.*
2. *Effectively communicate, using appropriate mathematical notation, processes and strategies in solving level appropriate problems including arithmetic operations, simplifying expressions, solving equations, geometry, and applications.*

PROGRAM REQUIREMENTS

In order to earn a Certificate of Competency students need to successfully complete the sequence of courses listed below.

REQUIRED COURSES: ALL NON-CREDIT

MATH 921	[1]	Integers	0
MATH 922	[1]	Fractions, Decimals, and Integers	0
MATH 923	[1]	Percents, Ratios, and Proportions	0
MATH 924	[1]	Graphing and Measurement	0

TOTAL UNITS REQUIRED IN CERTIFICATE OF COMPETENCY..... 0

Medical Assisting
PROGRAM
(209) 575-6362

The Modesto Junior College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

25400 US Highway 19 North, Suite 158

Clearwater, FL 33763

(727) 210-2350

This program prepares students to take the national certification exam offered by the American Association of Medical Assistants (AAMA) to become a Certified Medical Assistant (CMA). Medical assisting students at MJC receive transferable college credit for coursework. Many of the program graduates further their education by obtaining an A. S. Degree in Medical Assisting and/or Nursing.

The estimated program cost of $2,800 includes a $46/unit enrollment fee, a materials fee, various student fees, as well as uniform, books, certification exam, and clinical clearance process. Program cost at Modesto Junior College is very competitive with the cost of medical assisting programs offered by local trade schools. For information on Financial Aid, call (209) 575-7700.

The Medical Assisting Program begins in the fall and spring semester of each year. It is a full-time, eight-month, certificate program offering training in administrative (front) and clinical (back) office procedures. In addition to the reasonable cost of this program, students of Modesto Junior College have the added benefit of college credit and comprehensive student services. If you have questions about program information, call Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Medical Assisting Program. For academic advising, contact Shirley Buzbee, Medical Assisting Program Director, 575-6377.

ELIGIBILITY AND PREPARATION FOR THE MEDICAL ASSISTING PROGRAM

- **Admission to Modesto Junior College**
- **High school graduation or equivalent (GED or college degree)**

  If you have transcripts on file verifying a college degree, you do not need to have your high school transcripts on file.
- **Transcripts on File in MJC Enrollment Services**

  All transcripts (high school or equivalent and other colleges) must be on file in MJC Enrollment Services, Student Services Building, 102, (209) 575-6853 prior to the program application deadline. Enrollment Services will accept hand-carried transcripts that are in a sealed envelope with a school seal.

RECOMMENDED COMPETENCIES (FOR CERTIFICATE OF ACHIEVEMENT)

Complete English, math and reading assessment requirements by the program application deadline. The following competencies are recommended for success in the Medical Assisting Program.

WRITING COMPETENCY

ENGL 49	[NP]	Basic English Skills (C or better)..... 5 OR Eligibility for ENGL 50 on assessment test

MATH COMPETENCY

MATH 19 or 20	[NP]	Pre-algebra (C or better) .....4 or 5 OR Eligibility for MATH 29 OR MATH 30 by MJC assessment process

READING COMPETENCY

READ 184	[NP]	Critical Reading (C or better ..... 3 OR Reading competency (85) on Accuplacer OR completion of a college degree from a regionally accredited college or university.

PROGRAM PREREQUISITES

In addition to the Medical Assisting courses taken during the program, there are four required courses that must be completed in order to complete the Certification or Associate in Science Degree in Medical Assisting. In order to be accepted into the Medical Assisting Program you must have completed at least three of the four required courses listed below with a grade of C or better:

MEDICAL ASSISTING REQUIRED COURSES

AP 50	[NP]	Elementary Human Anatomy-Physiology 3
MDAST 321	[NP]	Medical Terminology.....3

CHOOSE ONE PSYCH COURSE FROM THE LIST BELOW:

PSYCH 51	[NP]	Psychology in Everyday Life.....3
PSYCH 101	[NP]	General Psychology 3

CHOOSE ONE COMM COURSE FROM THE LIST BELOW:

COMM 100	[NP]	Fundamentals of Public Speaking 3
COMM 102	[NP]	Introduction to Human Communication.....3
COMM 130	[NP]	Intercultural Communication 3

If the required coursework is in progress at time of application, you may be considered for acceptance, on a space available basis, at time of successful course completion.

PROGRAM APPLICATION

Applications are available on the Allied Health website www.mjc.edu/alliedhealth

February 1- August 15

Applications will continue to be accepted until the spring start program is full or

October 15

SELECTION PROCESS FOR THE PROGRAM

Applicants who have completed all four of the required courses with a grade of C or better will be accepted first. Applicants who have completed three of the four required courses with a grade of C or better will be accepted next. If there are more qualified applicants than space available, a random selection process will be used. Applicants who have required coursework in progress at time of application will be considered for acceptance, on a space available basis, once the in-progress coursework has been completed with a grade of C or better on transcript.

ADDITIONAL REQUIREMENTS FOR ACCEPTED APPLICANTS ONLY

Accepted applicants will receive information with instructions for completing the health clearance, background check, drug screen, and BLS certification.

HEALTH CLEARANCE

- A medical history and physical examination completed by a physician, physician's assistant, or nurse practitioner within 3 months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

BACKGROUND CHECK

Practicum sites will require students to provide a background check Certificate of Verification before they will be allowed to participate in the practicum portion of the program.

DRUG SCREEN

All students participating in the practicum experience will be required by the practicum sites to pass a drug screen.

BLS CERTIFICATION

BLS certification must be from the American Heart Association; for the Healthcare Provider (infant, child and adult); eligible for recertification; and current throughout the program.

SCHOLASTIC REQUIREMENTS

In order to be eligible for the National Certification Examination, all program requirements must be completed with a grade of C or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to be eligible to take the AAMA Certification Exam.

POLICY FOR DENIAL OF CERTIFICATION

Beginning with the January 2001 administration of the Certification Examination, felons are no longer eligible for the Certification Examination unless the American Association of Medical Assistants (AAMA) Certifying Board grants a waiver based on one or more of the mitigating circumstances listed in the Disciplinary Standards. Any student considering a career in medical assisting, who has a criminal record, is advised to contact the AAMA for advisement prior to entering the Medical Assisting Program.

American Association of Medical Assistants
20 N. Wacker Drive, Suite 1575
Chicago, IL 60606-2903
(800) 228-2262
www.aama-ntl.org

PROGRAM ADVISORY

* Students are strongly advised to complete the required curriculum listed under Required Courses (Non Medical Assisting) prior to entering the Medical Assisting program. These courses must be completed by the second semester of the program with a grade of C or better in order to complete the Medical Assisting program and be eligible to take the CMA exam

A.S. DEGREE: MEDICAL ASSISTING

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Provide competent medical assisting care, in variety of settings, based on the entry-level competencies for the Medical Assistant.*
2. *Communicate effectively with colleagues, patients/clients, and other members of the health care team.*
3. *Establish and maintain professional working relationships with men and women from diverse backgrounds.*
4. *Demonstrate understanding of the legal implications of healthcare and use critical thinking skills to make ethical decisions.*
5. *Set and achieve professional goals.*
6. *Make a substantial contribution to the quality of healthcare by representing the medical assisting profession with pride and dedication.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in Medical Assisting, the student must complete the requirements detailed in the Career Technical Education Pathway. Consult an advisor for selection of courses.

REQUIRED COURSES (NON MEDICAL ASSISTING)

AP 50	[NP]	Elementary Human Anatomy-Physiology	3
PSYCH 51	[NP]	Psychology in Everyday Life	3 OR
PSYCH 101	[NP]	General Psychology	3
COMM 100	[NP]	Fundamentals of Public Speaking	3 OR
COMM 102	[NP]	Introduction to Human Communication	3 OR
COMM 130	[NP]	Intercultural Communication	3

REQUIRED COURSES (MEDICAL ASSISTING)

[FIRST SEMESTER]

MDAST 320	[1]	Introduction to Medical Assisting	3
MDAST 321	[1]	Medical Terminology	3
MDAST 322	[1]	Medical Assisting Administrative Procedures	3.5
MDAST 323	[1]	Medical Assisting Clinical Procedures	3

[SECOND SEMESTER]

MDAST 324	[2]	Introduction to Diseases and Pharmacology	4
MDAST 325	[2]	Medical Assisting Laboratory Procedures	3
MDAST 326	[2]	Medical Assisting Practicum	7

TOTAL UNITS IN A.S. MAJOR..... 35.5
TOTAL UNITS IN A.S. DEGREE..... 60

* *The Health Education requirement has been waived for all Allied Health certificates and degrees.*

CERTIFICATE OF ACHIEVEMENT: **MEDICAL ASSISTING**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Provide competent medical assisting care, in variety of settings, based on the entry-level competencies for the Medical Assistant.*
2. *Communicate effectively with colleagues, patients/clients, and other members of the health care team.*
3. *Establish and maintain professional working relationships with men and women from diverse backgrounds.*
4. *Demonstrate understanding of the legal implications of healthcare and use critical thinking skills to make ethical decisions.*
5. *Set and achieve professional goals.*
6. *Make a substantial contribution to the quality of healthcare by representing the medical assisting profession with pride and dedication.*

REQUIRED COURSES (NON MEDICAL ASSISTING)

AP 50	[NP]	Elementary Human Anatomy-Physiology	3
PSYCH 51	[NP]	Psychology in Everyday Life	3 OR
PSYCH 101	[NP]	General Psychology	3
COMM 100	[NP]	Fundamentals of Public Speaking	3 OR
COMM 102	[NP]	Introduction to Human Communication	3 OR
COMM 130	[NP]	Intercultural Communication	3

REQUIRED COURSES (MEDICAL ASSISTING)

[FIRST SEMESTER]

MDAST 320	[1]	Introduction to Medical Assisting	3
MDAST 321	[1]	Medical Terminology	3
MDAST 322	[1]	Medical Assisting Administrative Procedures	3.5
MDAST 323	[1]	Medical Assisting Clinical Procedures	3

[SECOND SEMESTER]

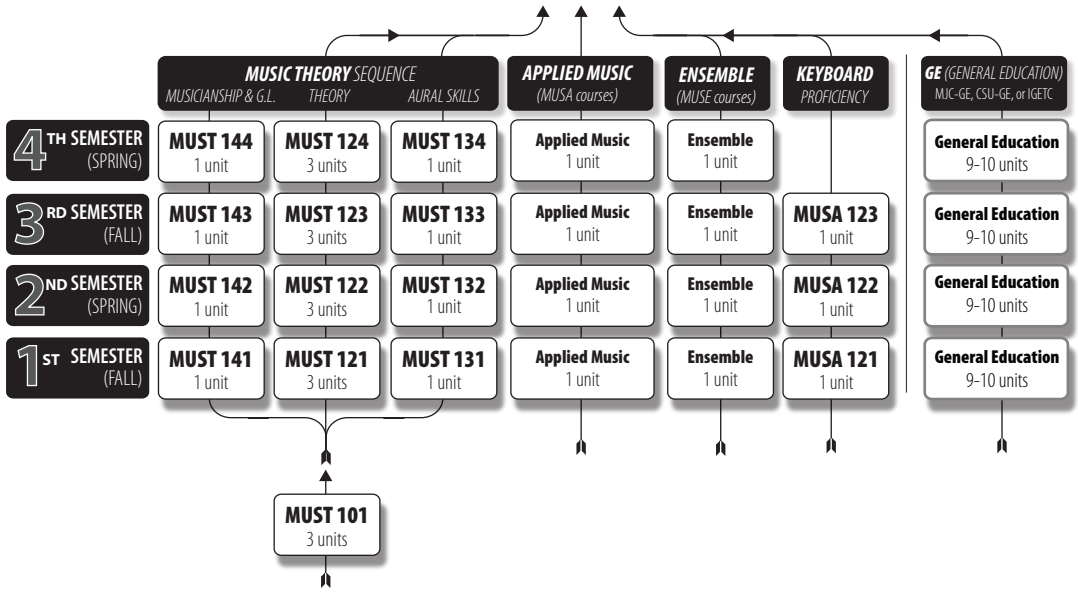
MDAST 324	[2]	Introduction to Diseases and Pharmacology	4
MDAST 325	[2]	Medical Assisting Laboratory Procedures	3
MDAST 326	[2]	Medical Assisting Practicum	7

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....35.5

AA: MUSIC 2-YEAR PLAN

Students who follow the *Career Technical Education Pathway* or the *University Preparation Pathway* and complete the requirements for the MJC A**ssociate in Arts Degree in Music** will satisfy lower-division requirements for the Bachelor of Music degree at 4-year institutions. The **bachelors degree in music** can lead to careers in fields such as **music performance, music education, music composition** and **music therapy**. Students who follow the *University Preparation Pathway* and complete the AA: Music requirements will also be eligible for the AA-T in Music degree.

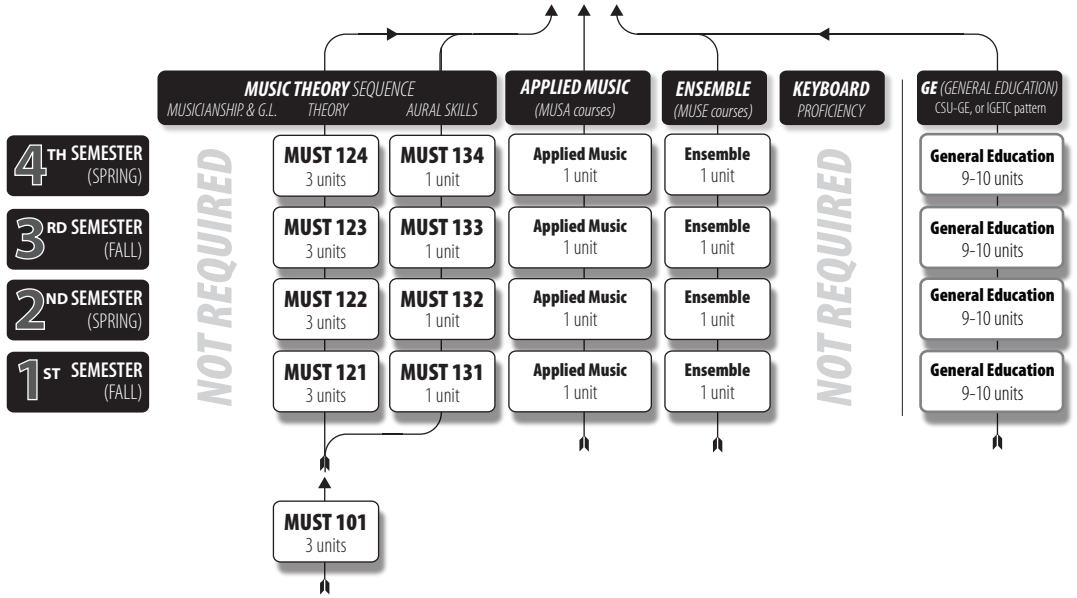
Eligible for AA in Music, AA-T in Music (when following requirements for the University Preparation Pathway) and transfer prepared for bachelor of music programs at 4-year academic institutions



AA-T: MUSIC 2-YEAR PLAN

Students who satisfy degree requirements for the **Associate in Arts for Transfer Degree in Music** will be prepared to pursue a bachelor of arts degree in music degrees at California State University Music departments as well as other 4 year academic institutions. The **bachelor of arts degree in music** can lead to careers in **general music** and **music technology.**

Eligible for AA-T in music, and transfer-prepared for bachelor of arts programs at four-year academic institutions



Music
PROGRAM
(209) 575-6081

The MJC Music Program offers courses for students wishing to earn an associate's degree in music, general education courses for non-music majors, and courses designed for community members. These include a comprehensive curriculum of music theory and musicianship. Ensemble and production courses include Concert and Symphonic Bands, Day and Evening Jazz Bands, Concert and Chamber Choirs, Masterworks Chorus, Community Orchestra, Guitar Orchestra, opera/musical theatre productions, chamber music performances, and electronic music productions. The program also offers applied studies in piano, organ, harpsichord, guitar, voice, violin/viola, cello/bass, woodwinds, and brass/percussion, as well as survey courses such as Music Appreciation, Introduction to World Music, Introduction to American Popular Music, and History of Western Music.

ABOUT THE DEGREE REQUIREMENTS

MUST 101

Theory Sequence Prerequisite Students with no music theory preparation must complete MUST 101 prior to starting the music theory sequence at MJC. Students with music theory background who wish to bypass MUST 101 must petition using a Prerequisite Challenge Form to gain admission into MUST 121. They must be prepared to take a placement test prior to the 1st day of class consisting of the following topics: musical notation of basic rhythms, all major and minor scales, key signatures, all diatonic intervals, and all triads and seventh chords. For more information please contact a music faculty member.

Applied Music Courses

Applied courses focus on the development of technical skill and insight into musical performance through primarily individualized instruction on a special instrument or voice. See an advisor to select the appropriate applied course. Auditions may be required

Ensemble Courses

Ensemble courses provide students with experience performing in a group setting such as Choir, Community Orchestra, Concert and Symphonic Band, Guitar Orchestra, as well as other smaller groups. See an advisor to select the appropriate ensemble course for your instrument/voice. Auditions may be required.

Keyboard Proficiency Courses

Music majors must take keyboard (piano) courses to prepare for the piano proficiency requirement within most bachelor of music degrees. Students whose primary instrument is piano may use applied piano coursework to satisfy this requirement.

General Education Courses

All candidates for an associate degree at MJC are required to satisfy general education requirements. Music majors should see a music advisor to select appropriate GE courses. Prerequisites may be required. 39 units for CSU-GE, 37-39 units for IGETC. Students who plan to pursue a bachelors degree after transferring are advised to follow CSU-GE or IGETC patterns.

Other Degree Requirements

Students who follow the Associate Degree for Transfer Pathway (CSU Transfer Model Curriculum) are exempt from the Guidance and Activity requirement for degree. Students who follow the Career/Technical Education Pathway or the University Preparation Pathway are not exempt from this requirement.

A.A.-T DEGREE: **MUSIC**

ABOUT THIS PROGRAM

The MJC Music Program offers courses for students wishing to earn an Associate's Degree in Music. Our comprehensive curriculum includes the following core classes for music majors: music theory and musicianship classes; ensemble classes that include Concert and Symphonic Bands, Day and Evening Jazz Bands, Concert and Chamber Choirs, Masterworks Chorus, Community Orchestra, Guitar Orchestra, Opera and Musical Theatre productions, as well as Chamber Music performances. The program also offers applied studies in piano, organ, harpsichord, guitar, voice, violin/viola, cello/bass, woodwinds, and brass/percussion. Lastly, our program also offers survey courses such as Music Appreciation, Introduction to World Music, Introduction to American Popular Music, and History of Western Music that can be taken as electives by both music and non-music majors.

The Associate in Arts in Music for Transfer Degree is intended for students who plan to complete a bachelor's degree in Music Studies at a CSU campus. Students completing the transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that accepts this degree will be required to complete no more than 60 units after transferring to earn a bachelor's degree. The transfer degree may not be the best option for students intending to transfer to a particular CSU campus or a university that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Decode and interpret musical notation and symbols through their instrument and/or voice.*
2. *Use basic musical notation in composition and performance.*
3. *Perform and stylistically interpret music on their applied instrument or voice, in an ensemble and/or in a solo setting.*
4. *Discuss the scope, variety, structure, and form of works in the canon of traditional western art music orally and in writing.*

THE FOLLOWING IS REQUIRED FOR THE AA DEGREE IN MUSIC FOR TRANSFER:

1. *A minimum of 18 semester units or 27 quarter units in the major with a grade of C or better or "P" (Pass) while maintaining a minimum grade point average (GPA) of at least 2.0 in all CSU transferable coursework.*
2. *Completion of 60 semester or 90 quarter CSU-transferable units using the CSU-GE Breadth or the IGETC pattern.*
3. *Exactly 60 semester units or 90 quarter units are required for the degree.*

REQUIRED CORE: (16 UNITS)

MUST 121	[NP]	Music Theory 1	3
MUST 122	[NP]	Music Theory 2	3
MUST 123	[NP]	Music Theory 3	3
MUST 124	[NP]	Music Theory 4	3
MUST 131	[NP]	Aural Skills 1	1
MUST 132	[NP]	Aural Skills 2	1
MUST 133	[NP]	Aural Skills 3	1
MUST 134	[NP]	Aural Skills 4	1

APPLIED COURSES, CHOOSE FROM THE FOLLOWING OFFERINGS ACCORDING TO AREA OF CONCENTRATION. FOUR SEMESTERS/FOUR UNITS ARE REQUIRED:

MUSA 124	[NP]	Applied Piano	1
MUSA 145	[NP]	Applied Classical Guitar	1
MUSA 153	[NP]	Applied Vocal Repertoire 1	1
MUSA 154	[NP]	Applied Vocal Repertoire 2	1
MUSA 163	[NP]	Applied Music (Violin & Viola)	1
MUSA 164	[NP]	Applied Music (Cello & Bass)	1
MUSA 173	[NP]	Applied Brass and Percussion	1
MUSA 183	[NP]	Applied Woodwinds	1

ENSEMBLE COURSES: CHOOSE FROM THE FOLLOWING OFFERINGS ACCORDING TO AREA OF CONCENTRATION. FOUR SEMESTERS/FOUR UNITS ARE REQUIRED:

MUSE 145	[NP]	Guitar Orchestra	1
MUSE 155	[NP]	Concert Choir	1
MUSE 156	[NP]	Chamber Choir	1
MUSE 161	[NP]	Community Orchestra	1
MUSE 165	[NP]	String Orchestra	1
MUSE 175	[NP]	Symphonic Band	1
MUSE 181	[NP]	Jazz Band	1

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 24

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	3-5

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities are not required for the Associate in Arts in Music for Transfer degree.*

A.A. DEGREE: **MUSIC**

The MJC Music Program offers courses for students wishing to earn an Associate's Degree in Music, general education courses for non-music majors, and courses designed for community members. These include a comprehensive curriculum of music theory and musicianship. Ensemble and production courses include Concert and Symphonic Bands, Day and Evening Jazz Bands, Concert and Chamber Choirs, Masterworks Chorus, Community Orchestra, Guitar Orchestra, opera/musical theatre productions, chamber music performances, and electronic music productions. The program also offers applied studies in piano, organ, harpsichord, guitar, voice, violin/ viola, cello/bass, woodwinds, and brass/percussion, as well as survey courses such as Music Appreciation, Introduction to World Music, Introduction to American Popular Music, and History of Western Music.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Decode and interpret musical notation and symbols through their instrument and/or voice.*
2. *Use basic musical notation in composition and performance.*
3. *Perform and stylistically interpret music on their applied instrument/voice in an ensemble and/or in a solo setting.*
4. *Discuss the scope, variety, structure, and form of works in the canon of traditional western art music orally and in writing.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below. Students who plan to transfer to a four-year school are strongly advised to meet with a member of the music faculty.

PROGRAM PREREQUISITES

MUST 101 [P] Music Fundamentals ..... 3 OR

SATISFACTORY SCORE on music theory placement examination offered during the first meeting of MUST 121. Students who do not meet entrance proficiencies will be encouraged to enroll in MUST 101 prior to enrollment in MUST 121.

REQUIRED COURSES IN MUSIC THEORY- COMPLETE 20 UNITS

MUST 121	[1]	Music Theory 1	3
MUST 131	[1]	Aural Skills 1	1
MUST 122	[2]	Music Theory 2	3
MUST 132	[2]	Aural Skills 2	1
MUST 123	[3]	Music Theory 3	3
MUST 133	[3]	Aural Skills 3	1
MUST 124	[4]	Music Theory 4	3
MUST 134	[4]	Aural Skills 4	1
MUST 141	[1]	Musicianship and Guided Listing 1	1
MUST 142	[2]	Musicianship and Guided Listing 2	1
MUST 143	[3]	Musicianship and Guided Listing 3	1
MUST 144	[4]	Musicianship and Guided Listing 4	1

ENSEMBLE-COMPLETE 4 UNITS

*Students whose primary instrument is woodwinds, brass, or percussion and who intend to participate in the Symphonic Band as their primary ensemble must enroll for a total of 8 units.

MUSE 145	[NP]	Guitar Orchestra	1
MUSE 155	[NP]	Concert Choir	1
MUSE 161	[NP]	Community Orchestra	1
MUSE 165	[NP]	String Orchestra	1
MUSE 175	[NP]	Symphonic Band	1

APPLIED MUSIC - COMPLETE 4 UNITS

MUSA 124	[NP]	Applied Piano	1
MUSA 145	[NP]	Applied Classical Guitar	1
MUSA 153	[NP]	Applied Vocal Repertoire 1	1
MUSA 154	[NP]	Applied Vocal Repertoire 2	1
MUSA 163	[NP]	Applied Music (Violin and Viola)	1
MUSA 164	[NP]	Applied Music (Cello and Bass)	1
MUSA 173	[NP]	Applied Brass and Percussion	1
MUSA 183	[NP]	Applied Woodwinds	1

*Music majors will typically combine ensembles and applied studies according to their primary instrument/voice. Vocalists will enroll in Concert Choir and the appropriate applied voice course. Orchestral instrumentalists will enroll in Community Orchestra and the appropriate applied strings course. Band instrumentalists will enroll in Symphonic Band and/or Jazz Band and applied woodwinds or brass/percussion. Guitarists will enroll in Guitar Orchestra and the appropriate applied guitar class. Students are strongly advised to seek the advice of a music faculty member specializing in his/her primary instrument/voice when choosing ensemble and applied music courses.

PIANO** - COMPLETE 2 UNITS

MUSA 121	[NP]	Keyboard Skills 1	1
MUSA 122	[NP]	Piano Enrichment	1
MUSA 123	[NP]	Intermediate Piano	1
MUSA 124	[NP]	Applied Piano	1

**Students whose primary instrument is piano may count their applied studies in piano toward this requirement.

TOTAL UNITS IN A. A. MAJOR 30

RECOMMENDED MUSIC ELECTIVES

ENSEMBLE-COMPLETE 1 -2 UNITS

Any ensemble other than the student's primary ensemble. (Students are advised to seek the advice of a faculty member directing that ensemble to determine if he/she has the appropriate experience to succeed in the ensemble.)

APPLIED MUSIC- COMPLETE 1-2 UNITS

Any applied music course other than that in the student's primary instrument/voice. (Students are advised to seek the advice of a faculty member specializing in that instrument/voice to determine which level of course is appropriate.)

OTHER- COMPLETE 1-3 UNITS

MUSG 121	[NP]	History of Western Music 1	3
MUSG 122	[NP]	History of Western Music 2	3
MUSP 151	[NP]	Musical Theatre Workshop	2
MUSP 153	[NP]	Advanced Musical Theatre Workshop	2

TOTAL OPTIONAL MUSIC ELECTIVES..... 3-7

SKILLS RECOGNITION: **RECORDING ARTS**

The Recording Arts Program at Modesto Junior College provides students the technical and musical skills to meet the challenges of today's ever changing field of modern music production. The program is designed for students who wish to pursue a career in the Sound Engineering, Sound Design, Music Production, Live Sound, Music Sales and Music Composition for Radio, TV, Film, and Video. The topics include recording studio techniques, live sound engineering, music production, sound design, synthesizers, music technology, music notation and music composition. Opportunities for hands on recording sessions, live sound mixing, original music composition and performance in concert are provided

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate effective use of current music technology as applied to recording and music production.*
2. *Record, mix and master an acoustic music group with multiple tracks and microphones, burn the work to a CD and present the work as a complete project.*
3. *Demonstrate the ability to select and correctly place microphones for sound capture.*
4. *Identify elements of sound and acoustics.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 12 UNITS

MUSC 111	[1]	Recording Arts 1	2
MUSC 112	[2]	Recording Arts 2	2
MUSC 126	[NP]	Introduction to Music Technology	3
MUSC 121	[3]	Electronic Music 1	2
MUSG 111	[NP]	Introduction to American Popular Music	3

ELECTIVE COURSES - COMPLETE 5 UNITS

MUSC 122	[4]	Electronic Music 2	2
MUST 101	[NP]	Music Fundamentals	3
MUSA 121	[NP]	Keyboard Skills 1	1
MUSG 101	[NP]	Music Appreciation	3
MUSG 112	[NP]	The Music of the Beatles	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 17

Nursing: Associate Degree Nursing (ADN) PROGRAM
(209) 575-6362

The Associate Degree Nursing (ADN) Program at Modesto Junior College prepares students to take the National Council Licensure Examination (NCLEX-RN), leading to licensure as a Registered Nurse (RN). The program is approved by the California Board of Registered Nursing (BRN). The ADN Program begins in the fall and spring semesters of each year. It is a four-semester program. Although most classes are scheduled during the day, clinical experiences may include morning, evening, night and weekend hours. During the five-week Leadership Preceptorship in Nurse 278, students will be expected to be in the clinical area on a full-time basis. Students must be flexible and prepared to accept these assignments.

Program expenses vary for each individual. The estimated cost for the program is $6,200. First semester start-up costs are approximately $2,500. Second, third, and fourth semester costs total $3,600. These costs include enrollment and materials fees, background check and drug screen fees, health clearance, Basic Life Support (BLS) Certification, uniforms, books, and a pre-licensure readiness examination. Daily access to a computer and the internet is required for student success.

For information on financial aid, call (209) 575-7700. For more information about the nursing program and the selection process, please enroll in NURSE 115: Introduction for Nursing Majors. If you have questions about program information, call Allied Health, (209) 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Associate Degree Nursing (ADN) Program. If you are just beginning your preparation for the nursing program and need academic advising, contact the Counseling Center (209) 575-6080.

ELIGIBILITY AND PREPARATION FOR THE ASSOCIATE DEGREE NURSING PROGRAM

- **Admission to Modesto Junior College**
- **Official Transcripts on File in MJC Enrollment Services:** All transcripts (from colleges other than MJC and Columbia College (CC) must be submitted as a part of your documentation packet if requested by the ADN Program, unless the transcripts are already on file in the MJC Enrollment Services, Student Services Building 102, (209) 575-6853. We will accept hand-carried transcripts that are in a sealed envelope with a school seal.

REQUIRED MATH COMPETENCY FOR ACCEPTANCE INTO THE ADN PROGRAM

- Eligibility for entrance into any 100-level MATH course through MJC Assessment process OR
- Score of 3, 4, or 5 on AP Exam: Calculus AB OR Calculus BC or Statistics OR
- Completion of MATH 89 at MJC or higher level MATH course, or an equivalent course from another institution with a grade of C or higher. Course may be taken as P/NP or CR/NC
- Score of 5 on IB exam; Mathematics HL

Bachelor's degree holders are considered to have met this requirement.

In accordance with the California Nursing Practice Act and the Board of Registered Nursing (BRN), the California Code of Regulations (CCR) Section 1430 states: An approved nursing program shall have a process for a student to obtain credit for previous education or for other acquired knowledge in the field of nursing through equivalence, challenge examinations, or other methods of evaluation. The program shall make the information available in published documents, such as college catalog or student handbook, and online. Students interested in obtaining credit for previous education or for other acquired knowledge in the field of nursing should reference the current MJC catalog under "Credit." In addition, the student may make an appointment with a nursing advisor by calling (209) 575-6362. A nursing advisor will inform the student of available options and assist the student in completing the process for the appropriate option such as course equivalency, course substitution, upper division course credit, course challenges, advanced placement and/or theory and skill set critical element testing.

PROGRAM APPLICATION

The ADN program application is online. Applications are accepted for the ADN Program once per year. The annual application period is **May 1 through May 31.** Students are selected from the annual applicant pool for fall and spring semesters of that academic year. Applications are available on the Allied Health website (www.mjc.edu/alliedhealth) during the May application period only. If you are interested in the MJC ADN transfer policy go to www.mjc.edu/alliedhealth.

SELECTION PROCESS

The ADN Program utilizes a multicriteria screening process for admission.

MULTICRITERIA SCREENING PROCESS

The ADN program selects students based on a Multicriteria Screening Process. Detailed information is posted on the ADN website. This selection model is based on Assembly Bill 1559. Applicants will be evaluated on 1) academic degree, relevant licenses or certificates, relevant work or volunteer experience, 2) GPA in relevant coursework, 3) life experiences or special circumstances, 4) proficiency in a language other than English and the 5) Test of Essential Academic Skills (TEAS.) The TEAS measures skills in the content area domains of Reading, Mathematics, Science and English and Language Usage. Preparation materials are available in the MJC Library & Learning Center, and Assessment Technologies Institute (ATI) at www.atitesting.com.

Prospective nursing students are required to have a total scaled score of 427 (62%) or higher on the Test of Essential Academic Skills (TEAS) within the first two attempts to apply to the MJC Associate Degree Nursing (ADN) program. For information on scheduling a TEAS, go to www.atitesting.com. The TEAS is offered at the MJC testing center.

ADDITIONAL REQUIREMENTS FOR ACCEPTED APPLICANTS ONLY

Accepted applicants will receive information regarding clinical clearance.

CLINICAL CLEARANCE

HEALTH CLEARANCE

- A medical history and physical examination completed by a physician, physician's assistant, or nurse practitioner within six months prior to program start date or re-entry date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative tuberculosis skin test (TST) must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

BACKGROUND CHECK

All students participating in clinical assignments are required by acute care facilities to complete a criminal background check and be cleared by the clinical facility in order to participate in the clinical experience. See Policy for Denial of Licensure below.

DRUG SCREEN

All students participating in clinical assignments will be required to pass a drug screen.

BASIC LIFE SUPPORT (BLS) CERTIFICATION

The ADN program will offer a Health Care Provider Basic Life Support (BLS) class from the American Heart Association (AHA) for all accepted applicants. Students are required to purchase an AHA BLS for Healthcare Provider textbook.

SCHOLASTIC REQUIREMENTS

Continuation in the ADN Program is dependent upon completion of all courses with a grade of C or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to qualify for the NCLEX-RN. In the ADN program, seventy six percent (76%) is the minimum score required to obtain a grade of C.

POLICY FOR DENIAL OF LICENSURE

The California BRN protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. Statutory authority for denial of licensure is contained in the Business and Professions Code. Any student considering a career in nursing who has a criminal record is advised to go to the BRN website at www.rn.ca.gov and search Enforcement and then License Discipline and Convictions prior to applying to the ADN Program.

- Pre-nursing students with a criminal record should attempt to have convictions expunged prior to applying for entrance into the nursing program. A criminal record may prevent students from clinical placement and therefore, continuing in a nursing program.

PROGRAM ADVISORY

* Students are strongly advised to complete the additional MJC GE Graduation Requirements (Activities – 2 units, Guidance – 0.5 unit, and Humanities – 3 units) prior to entering the ADN Program. These courses must be successfully completed by the end of the 4th semester of the program to be considered a graduate of the ADN Program and be eligible to take the NCLEX-RN. To graduate from the MJC ADN Program, a student must: 1) complete all ADN Program requirements; 2) complete the 4th semester of the MJC ADN Program; 3) complete 12 units "in residence" at MJC; and 4) complete the MJC GE graduation requirements.

A.S. DEGREE:
NURSING: ASSOCIATE DEGREE NURSING PROGRAM (RN)

The Associate Degree Nursing (ADN) program at Modesto Junior College prepares students to take the National Council Licensure Examination (NCLEX-RN), leading to licensure as a Registered Nurse (RN). The program is approved by the California Board of Registered Nursing (BRN).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student:

1. *Formulates a nursing diagnosis through observation of the client's physical condition and behavior, and through interpretation of information obtained from the client and others, including the health team.*
2. *Formulates a care plan, in collaboration with the client, which ensures that direct and indirect nursing care services provide for the client's safety, comfort, hygiene, and protection, and for disease prevention and restorative measures.*
3. *Performs skills essential to the kind of nursing action to be taken, explains the health treatment to the client and family and teaches the client and family how to care for the client's health needs.*
4. *Delegates tasks to subordinates based on the legal scopes of practice of the subordinates and on the preparation and capability needed in the tasks to be delegated, and effectively supervises nursing care being given by subordinates.*
5. *Evaluates the effectiveness of the care plan through observation of the client's physical condition and behavior, signs and symptoms of illness, and reactions to treatment and through communication with the client and health team members, and modifies the plan as needed.*
6. *Acts as the client's advocate, as circumstances require, by initiating action to improve health care or to change decisions or activities which are against the interests or wishes of the client, and by giving the client the opportunity to make informed decisions about health care before it is provided.*
7. *Employs concepts of the Roy Adaptation Model to individualize patient-centered care.*

PROGRAM PREREQUISITES

ANAT 125	[NP]	Human Anatomy	4
MICRO 101	[NP]	Microbiology	4
PHYSO 101	[NP]	Introductory Human Physiology	4
ENGL 100	[NP]	Intensive Reading, Writing, and Reasoning	5 OR
ENGL 101	[NP]	Composition and Reading	3
PSYCH 141	[NP]	Human Lifespan Development	3

Psychology 101: General Psychology or the equivalent course taken prior to fall 2016 will continue to be accepted for acceptance into the ADN program.

COMPLETE ONE COURSE FROM THE FOLLOWING:

ANTHR 102	[NP]	Cultural Anthropology	3
SOCIO 101	[NP]	Introduction to Sociology	3
SOCIO 102	[NP]	Social Problems in the United States	3
SOCIO 125	[NP]	Sociology of the Family	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3
SOCIO 154	[NP]	African-American Cultures and Communities	3
SOCIO 156	[NP]	Mexican Culture in the United States	3

COMPLETE ONE COURSE FROM THE FOLLOWING:

COMM 100	[NP]	Fundamentals of Public Speaking	3
COMM 102	[NP]	Introduction to Human Communication	3
COMM 110	[NP]	Persuasion	3

TOTAL UNITS IN PREREQUISITE COURSES.....24-26

PROGRAM REQUIREMENTS

[FIRST SEMESTER]

NURSE 270 [1] Nursing Process: Pharmacology 2
Theory: 2 Units/36 Hours **Clinical:** 0 Hours

NURSE 271 [1] Nursing Process: Fundamentals 6.5
Theory: 3 Units/54 Hours **Clinical:** 3.5 Units/189 Hours
FIRST SEMESTER TOTAL UNITS 8.5

[SECOND SEMESTER]

NURSE 272 [2] Nursing Process: Geriatrics 1
Theory: 0.5 Units/9 Hours **Clinical:** 0.5 Units/27 Hours

NURSE 273 [2] Nursing Process: Maternal-Child 6.5
Theory: 3 Units/54 Hours **Clinical:** 3.5 Units/189 Hours

SECOND SEMESTER TOTAL UNITS.....7.5

[THIRD SEMESTER]

NURSE 274 [3] Nursing Process: Mental Health.....3
Theory: 2 Units/36 Hours **Clinical:** 1 Unit/54 Hours

NURSE 275 [3] Nursing Process: Medical - Surgical.....7
Theory: 3.5 Units/63 Hours **Clinical:** 3.5 Units/189 Hours

THIRD SEMESTER TOTAL UNITS.....10

[FOURTH SEMESTER]

NURSE 278 [4] Nursing Process: Advanced Medical - Surgical.....10
Theory: 4 Units/72 Hours **Clinical:** 6 Units/324 Hours

FOURTH SEMESTER TOTAL UNITS.....10

TOTAL UNITS IN NURSING MAJOR 36
36 Total Units=1296 Hours, 18 Theory Units=324 Hours, 18 Clinical Units= 972 Hours

TOTAL UNITS WITH PREREQUISITE COURSEWORK & NURSING MAJOR COURSEWORK 60-62

A.S. DEGREE: NURSING (FOR RN)

To earn an Associate in Science Degree in Nursing, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway in addition to the Nursing coursework. Consult with an advisor for selection of courses. (5.5 units)

MINIMUM UNITS IN A.S. DEGREE 65.5- 67.5

ELECTIVE COURSES (NURSING: WORK EXPERIENCE)

Work experience in nursing is offered for students who have completed the first semester of the ADN program. Student nurses must extern at a contracted facility.

NURWE 361 [2,3,4] Work Experience-Nursing A 1
NURWE 362 [2,3,4] Work Experience-Nursing B.....2

MILITARY/VETERANS:

Corpsman/Medics with recent experience may enter the ADN program in 2nd semester.

- Complete 3 semesters/5 courses; NURSE 272, NURSE 273, NURSE 274, NURSE 275 & NURSE 278
- Total units=27.5: Theory - 13 units/234 hours; Clinical - 14.5 units/783 hours

ADVANCED PLACEMENT PATHWAY;LVN/PSYCH TECH:

LVNs from private programs may enter ADN program in 2nd semester:

- Complete 3 semesters/4 courses; NURSE 273, NURSE 274, NURSE 275, NURSE 278
- Total units=26.5: Theory - 12.5 units/225 hours; Clinical - 14 units/756 hours

LVNs from community colleges may enter ADN program in 3rd semester:

- Complete 2 semesters/3 courses; NURSE 274, NURSE 275, NURSE 278
- Total units=19.5: Theory - 9.5 units/171 hours; Clinical - 10.5 units/567 hours

Psych Techs may enter the ADN program in 2nd semester:

- Complete 3 semesters/5 courses; NURSE 272, NURSE 273, NURSE 274, NURSE 275, NURSE 278
- Total units=27.5: Theory - 13 units/234 hours; Clinical - 14.5 units/783 hours

A.S. DEGREE:
NURSING: LVN TO ADN (RN) ADVANCED PLACEMENT PATHWAY

The Licensed Vocational Nurse (LVN) to Associate Degree Nursing (ADN) Advanced Placement Pathway at Modesto Junior College prepares students to take the National Council Licensure Examination (NCLEX-RN), leading to licensure as a Registered Nurse (RN). The pathway is approved by the California Board of Registered Nursing (BRN).

The LVN to ADN Advanced Placement Pathway begins in the fall and spring semesters of each year. It is a two-three semester pathway. Students enter in the second or third semester of the ADN Program. Although most classes are scheduled during the day, clinical experiences may include morning, evening, night, and weekend hours. During the five-week Leadership Preceptorship in NURSE 278, students will be expected to be in the clinical area on a full-time basis. Students must be flexible and prepared to accept these assignments.

Pathway expenses vary for each individual. The estimated cost for the pathway is approximately $4,000. Startup costs are approximately $2,000. These costs include enrollment and materials fees, background check and drug screen fees, health clearance, Basic Life Support (BLS) certification, uniforms, books and pre-licensure readiness examination. Daily access to a computer and the internet is required for student success. For information on financial aid, call (209) 575-7700. For academic advising contact Allied Health, (209) 575-6362. For program information, call Allied Health, (209) 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search LVN to ADN Advanced Placement Pathway.

ELIGIBILITY AND PREPARATION FOR THE LVN TO ADN ADVANCED PLACEMENT PATHWAY

- **Admission to Modesto Junior College**
- **Official Transcripts on File in MJC Enrollment Services:** All transcripts (from colleges other than MJC and (CC) must be submitted as a part of your documentation packet if requested by the ADN Program, unless the transcripts are already on file in the MJC Enrollment Services, Student Services Building 102, (209) 575-6853. We will accept hand-carried transcripts that are in a sealed envelope with a school seal.

REQUIRED MATH COMPETENCY FOR ACCEPTANCE INTO THE ADN PROGRAM

- Eligibility for entrance into any 100-level MATH course through MJC Assessment process OR
- Score of 3, 4, or 5 on AP Exam: Calculus AB or Calculus BC or Statistics OR
- Completion of MATH 89 at MJC or higher level MATH course, or an equivalent course from another institution with a grade of C or higher. Course may be taken as a P/NP or CR/NC
- Score of 5 on IB exam; Mathematics HL

Bachelor's degree holders are considered to have met this requirement.

PATHWAY APPLICATION

The application is online. Applications are accepted once a year. The annual application period is May 1 through May 31. Students are selected from the annual applicant pool for fall and spring semesters of that academic year. Applications are available on the Allied Health website (www.mjc.edu/alliedhealth) during the May application period only. If you are interested in the MJC ADN transfer policy go to www.mjc.edu/alliedhealth.

SELECTION PROCESS

The ADN Program utilizes a mulitcriteria screening process for admission.

MULTICRITERIA SCREENING PROCESS

The ADN program selects students based on a Multicriteria Screening Process. Detailed information is posted on the ADN website. This selection model is based on Assembly Bill 1559. Applicants will be evaluated on 1) academic degree, relevant licenses or certificates, relevant work or volunteer experience, 2) GPA in relevant coursework, 3) life experiences or special circumstances, 4) proficiency in a language other than English and the 5) Test of Essential Academic Skills (TEAS.) The TEAS measures skills in the content area domains of Reading, Mathematics, Science and English and Language Usage. Preparation materials are available in the MJC Library & Learning Center, and from Assessment Technologies Institute (ATI) at www.atitesting.com.

Prospective nursing students are required to have a total scaled score of 427 (62%) or higher on Test of Essential Academic Skills (TEAS) within the first two attempts to apply to the MJC Associate Degree Nursing (ADN) Program. For information on scheduling a TEAS, go to atitesting.com. The TEAS is offered at the MJC testing center.

ADDITIONAL REQUIREMENTS FOR ACCEPTED APPLICANTS ONLY

Accepted applicants will receive information regarding clinical clearance.

CLINICAL CLEARANCE

HEALTH CLEARANCE

- A medical history and physical examination completed by a physician, physician's assistant, or nurse practitioner within six months prior to program start date or re-entry date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative tuberculosis skin test (TST) must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

BACKGROUND CHECK

All students participating in clinical assignments are required by acute care facilities to complete a criminal background check and be cleared by the clinical facility in order to participate in the clinical experience. See policy for denial of licensure.

DRUG SCREEN

All students participating in clinical assignments will be required to pass a drug screen.

BASIC LIFE SUPPORT (BLS) CERTIFICATION

The ADN program will offer a Health Care Provider Basic Life Support (BLS) class from the American Heart Association (AHA) for all accepted applicants. Students are required to purchase an AHA BLS for Healthcare textbook.

SCHOLASTIC REQUIREMENTS

Continuation in the LVN to ADN Advanced Placement Pathway is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to qualify for the National Council Licensure Examination (NCLEX-RN). In the ADN program, seventy six percent (76%) is the minimum score required to obtain a grade of C.

POLICY FOR DENIAL OF LICENSURE

The California BRN protects the public by screening applicants for licensure in order to identify potentially unsafe practitioners. Statutory authority for denial of licensure is contained in the Business and Professions Code. Any student considering a career in nursing who has a criminal record is advised to go to the BRN website at www.rn.ca.gov and search Enforcement and then License Discipline and Convictions prior to applying

to the ADN Program.

- Pre-nursing students with a criminal record should attempt to have convictions expunged prior to applying for entrance into the nursing program. A criminal record may prevent students from clinical placement and therefore, continuing in a nursing program.

PROGRAM ADVISORY

* Students are strongly advised to complete the additional MJC GE Graduation Requirements (Activities – 2 units, Guidance – 0.5 unit, and Humanities – 3 units) prior to entering the LVN to ADN Advanced Placement Pathway. These courses must be successfully completed by the end of the 4th semester of the program to be considered a graduate of the MJC ADN Program and be eligible to take the NCLEX-RN. To graduate from the MJC ADN Program, a student must: 1) complete all LVN to ADN Advanced Placement Pathway requirements; 2) complete the 4th semester of the MJC ADN program; 3) complete 12 units "in residence" at MJC; and 4) complete the MJC GE graduation requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student:

1. *Formulates a nursing diagnosis through observation of the client's physical condition and behavior, and through interpretation of information obtained from the client and others, including the health care team.*
2. *Formulates a care plan, in collaboration with the client, which ensures that direct and indirect nursing care services provide for the client's safety, comfort, hygiene, and protection, and for disease prevention and restorative measures.*
3. *Performs skills essential to the kind of nursing action to be taken, explains the health treatment to the client and family and teaches the client and family how to care for the client's health needs.*
4. *Delegates tasks to subordinates based on the legal scopes of practice of the subordinates and on the preparation and capability needed in the tasks to be delegated, and effectively supervises nursing care being given by subordinates.*
5. *Evaluates the effectiveness of the care plan through observation of the client's physical condition and behavior, signs and symptoms of illness, and reactions to treatment and through communication with the client and health team members, and modifies the plan as needed.*
6. *Acts as the client's advocate, as circumstances require, by initiating action to improve health care or to change decisions or activities which are against the interests or wishes of the client, and by giving the client the opportunity to make informed decisions about health care before it is provided.*
7. *Employs concepts of the Roy Adaptation Model to individualize patient-centered care.*

A.S. DEGREE NURSING: LVN TO ADN (RN) ADVANCED PLACEMENT PATHWAY PREREQUISITES

Must be a Licensed Vocational Nurse with an active license and IV certification in California. Submit a copy of the current license. NOTE: An applicant who became an LVN by challenging the LVN Board must complete 30 college units in the nursing major and have a total of 60 college units in order to receive an A.S. Degree. Contact Allied Health for advising regarding this issue at (209) 575-6362.

NURSE 259	[NP]	Transition into the RN Role	2
ANAT 125	[NP]	Human Anatomy	4
MICRO 101	[NP]	Microbiology	4
PHYSO 101	[NP]	Introductory Human Physiology	4
ENGL 100	[NP]	Intensive Reading, Writing, and Reasoning	5 OR
ENGL 101	[NP]	Composition and Reading	3
PSYCH 141	[NP]	Human Lifespan Development	3

Psychology 101: General Psychology or the equivalent course taken prior to fall 2016 will continue to be accepted for acceptance into the ADN program.

COMPLETE ONE COURSE FROM THE FOLLOWING:

ANTHR 102	[NP]	Cultural Anthropology	3
SOCIO 101	[NP]	Introduction to Sociology	3
SOCIO 102	[NP]	Social Problems in the United States	3
SOCIO 125	[NP]	Sociology of the Family	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3
SOCIO 154	[NP]	African-American Cultures and Communities	3
SOCIO 156	[NP]	Mexican Culture in the United States	3

COMPLETE ONE COURSE FROM THE FOLLOWING:

COMM 100	[NP]	Fundamentals of Public Speaking	3
COMM 102	[NP]	Introduction to Human Communication	3
COMM 110	[NP]	Persuasion	3

TOTAL ADVANCED PLACEMENT PATHWAY PREREQUISITE UNITS 26-28

A.S. DEGREE NURSING: LVN TO ADN (RN) ADVANCED PLACEMENT PATHWAY REQUIREMENTS

[FIRST SEMESTER]

NURSE 273	[1]	Nursing Process: Maternal child	6.5 OR
NURSE 274	[1]	Nursing Process: Mental Health	3
NURSE 275	[1]	Nursing Process: Medical - Surgical	7

[SECOND SEMESTER]

NURSE 274	[1]	Nursing Process: Mental Health	3
NURSE 275	[1]	Nursing Process: Medical - Surgical	7 OR
NURSE 278	[2]	Nursing Process: Advanced Medical-Surgical	10

[THIRD SEMESTER]

NURSE 278	[3]	Nursing Process: Advanced Medical-Surgical	10

TOTAL UNITS IN A.S. DEGREE NURSING: LVN TO ADN (RN) ADVANCED PLACEMENT PATHWAY 20-26.5

TOTAL UNITS WITH *PREREQUISITE COURSEWORK* FOR A.S. DEGREE NURSING: LVN TO ADN (RN) ADVANCED PLACEMENT PATHWAY..... .....46-54.5

To earn an Associate in Science degree in Nursing the student must complete the requirements detailed in the Career Technical Pathway or the University Preparation Pathway in addition to the Nursing/LVN to ADN Advanced Placement Pathway coursework. Consult with an advisor for selection of courses. (5.5 units)

MINIMUM UNITS IN A.S. DEGREE NURSING: LVN TO ADN (RN) ADVANCED PLACEMENT PATHWAY.....51.5-60

NURSING:
LVN 30 UNIT OPTION (LVN TO RN)

In addition to the LVN to ADN Advanced Placement Pathway, there is also an LVN 30 Unit Option which prepares students to take the NCLEX-RN but does not award an A.S. degree. Students interested in this option should contact the Director of Nursing in Allied Health for information and advising.

Nursing: Nurse Assistant
PROGRAM
(209) 575-6362

The Nurse Assistant Program at Modesto Junior College prepare students to take the State Certification Exam, leading certification as a Nurse Assistant (CNA). The program is approved by California Department of Public Health. A CNA is an important member of the Healthcare team who helps people in need. In the 16 - week program, the student will complete 60 hours of theory and 100 hours of clinical. The student learns safe and effective ways to assist ill, disabled, and/or elderly people with the basic activities of living, such as bathing, dressing, feeding, toileting, grooming and mobility. Students also learn communication skills, professional behavior, the importance of teamwork, and how to provide social and emotional support to the people they care for. CNA's work in skilled nursing facilities with the elderly, in hospital settings, and in homes.

ELIGIBILITY AND PREPARATION FOR THE NURSE ASSISTANT PROGRAM

- **Admission to Modesto Junior College**
- **High School Graduation or Equivalent** (GED or College Degree)
  Although high school graduation is not required, it is recommended for success.

RECOMMENDED COMPETENCY

The following competency is recommended for success in the Nurse Assistant Program.

READ 184 [NP] Critical Reading (C or better)..... 3 OR
Reading competency (85) on Accuplacer ..... OR
Completion of a college degree from an accredited United States college.

PROGRAM PREREQUISITES

None required

PROGRAM APPLICATION

None required

SKILLS RECOGNITION: **NURSE ASSISTANT**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Provide competent resident care based on the skill set of a certified nurse assistant (CNA).*
2. *Complete the required hours for theory and clinical as set by the State of California.*
3. *Provide compassionate end of life care.*
4. *Communicate professionally with residents, families, peers and professional staff.*
5. *Pass the state of California certification examination as a Certified Nurse Assistant (CNA).*

REQUIRED CURRICULUM

NURSE 52 [NP] Nurse Assistant .....5.5 AND
NURSK 800 [NP] Nursing Skills Development 0

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 5.5

ADDITIONAL REQUIREMENTS FOR STUDENTS ENROLLED IN NURSE 52

Please Note : In order to complete the health clearance process in a timely manner, students who are enrolled in NURSE 52 must attend a mandatory orientation. Enrolled students will be notified via student email of the date and time of the orientation. Instructions for completing the health clearance will be provided at the orientation. It is expected that enrolled students will have already begun the health clearance process prior to the first day of class.

CLINICAL CLEARANCE

HEALTH CLEARANCE

- A medical history and physical examination completed by a physician, physician's assistant, or nurse practitioner within three months prior to program start date. The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative tuberculosis skin test (TST) must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

FINGERPRINTING AND BACKGROUND CHECK

- All students participating in clinical assignments are required to complete a criminal background check and Live Scan to be cleared by California Department of Public Health (CDPH) in order to participate in the clinical experience. The students will not be charged for this requirement.

NURSE ASSISTANT CERTIFICATION APPLICATION (HS-283B)

- Nurse 52 students will receive required forms and instructions on completing the CDPH application process on the first day of class.

POLICY FOR DENIAL OF CERTIFICATION

Individuals who have been convicted of certain penal code violations will not be certified unless the individual submits written evidence obtained from the court of "rehabilitation" (if a felony) or a dismissal of the violation (if a misdemeanor). If you have been convicted of one of these crimes, you should be aware that you cannot be certified unless you meet the specified conditions of rehabilitation or dismissal issued by the courts and have received approval from the CDPH. All other convictions not listed, except minor traffic violations, are subject to department review and require that you submit additional information.

TO REQUEST CLEARANCE FOR PRIOR CONVICTION(S) OR DISCIPLINARY ACTION, CONTACT:

California Department of Public Health
ATCS MS 3201
PO Box 997416
Sacramento, CA 95899-7416
(916) 327-2445
www.cdph.ca.gov

Office Administration
PROGRAM
(209) 575-6129

A.S. DEGREE:
CLERICAL

The Clerical Program is designed to prepare students for various types of office occupations in the clerical field. Clerical training involves the study of various procedures, duties, and practices applicable to many business offices, as well as the development and acquisition of basic skills necessary for success in those positions. Students learn keyboarding, records management, human relations, office software, and business computations. Career possibilities in the clerical field are numerous. Jobs exist in governmental agencies, schools, health facilities, stores, and in private businesses. Some of the career alternatives for clerical graduates are records clerk, file clerk, general office clerk, mail clerk, receptionist, word processor, and office assistant.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Productively work as a team member with people of diverse experiences and backgrounds in a workplace environment.*
2. *Demonstrate the ability to competently use a wide variety of office equipment, including computers, peripherals, and other office machines.*
3. *Actively assist in implementing general office procedures, including records management.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the requirements detailed in the Career Technical Educational Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES

OFADM 202	[1]	Intermediate Keyboarding 2	2
OFADM 231	[2]	Intermediate Word Processing	3
OFADM 259	[3]	Introduction to Spreadsheet Software	1
OFADM 262	[3]	Introduction to Business Presentation Software	1
OFADM 304	[2]	Professional English for Business	3
OFADM 305	[3]	Records Management	3
OFADM 313	[1]	Skills for the Workplace	3
OFADM 314 *	[3]	Office Procedures & Technologies	3
OFADM 315 **	[4]	Today's Office	2
OFADM 316	[1]	Introduction to Microsoft Outlook	1
OFADM 320	[3]	Telephone Techniques	1
OFADM 330	[1]	Beginning Word Processing	3
OFADM 375	[4]	10-Key on the Computer	1
BUSAD 50	[2]	Business Computations	3

TOTAL UNITS IN A.S. MAJOR 30

**Offered only in fall semester*

***Offered only in spring semester*

A.S. DEGREE:
OFFICE ADMINISTRATION

The Office Administration A.S. Degree Program is designed to prepare students for occupations in the office administration field. Some career possibilities are administrative assistant, executive secretary, office supervisor, and office manager. Office administration involves the study of office procedures, duties, and practices applicable to many business offices, as well as the development and acquisition of skills necessary for success in these positions. Students learn keyboarding, word processing, human relations, business communication, and entry-level bookkeeping. Word processing, letter composition, and office procedures are emphasized to prepare students for the assumption of responsible positions.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Productively work as a team member with people of diverse experiences and backgrounds in a workplace environment.*
2. *Competently communicate in support of a business office, including production and design of complex electronic and paper based correspondence and documents.*
3. *Use the Internet and a wide variety of computer applications to compute, to analyze, and to solve business problems.*
4. *Use the Internet, a wide variety of computer applications and standard business procedures to compute, analyze business performance and solve problems.*
5. *Efficiently perform office-related duties utilizing prioritization and necessary communication skills.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the requirements detailed in the Career Technical Educational Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES

OFADM 202	[1]	Intermediate Keyboarding 2	2
OFADM 231	[2]	Intermediate Word Processing	3
OFADM 232 *	[3]	Advanced Word Processing and Desktop Publishing	3
OFADM 259	[1]	Introduction to Spreadsheet Software	1
OFADM 260	[2]	Intermediate Spreadsheet Software	1
OFADM 261	[1]	Introduction to Databases	1
OFADM 262	[1]	Introduction to Business Presentation Software	1
OFADM 304	[2]	Professional English for Business	3
OFADM 314 *	[3]	Office Procedures & Technologies	3
OFADM 315 **	[4]	Today's Office	2
OFADM 316	[1]	Introduction to Microsoft Outlook	1
OFADM 320	[1]	Telephone Techniques	1
OFADM 375	[3]	10-Key on the Computer	1
BUSAD 210	[4]	Business Communication	3
BUSAD 310	[3]	Bookkeeping 1	3 OR
BUSAD 201	[3]	Financial Accounting	4

TOTAL UNITS IN A.S. MAJOR 29-30

**Offered only in fall semester*

***Offered only in spring semester*

CERTIFICATE OF ACHIEVEMENT: **CLERICAL**

The Clerical Program is designed to prepare students for various types of office occupations in the clerical field. Clerical training involves the study of various procedures, duties, and practices applicable to many business offices, as well as the development and acquisition of basic skills necessary for success in those positions. Students learn keyboarding, records management, human relations, office software, and business computations. Career possibilities in the clerical field are numerous. Jobs exist in governmental agencies, schools, health facilities, stores, and in private businesses. Some of the career alternatives for clerical graduates are records clerk, file clerk, general office clerk, mail clerk, receptionist, word processor, and office assistant.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Productively work as a team member with people of diverse experiences and backgrounds in a workplace environment.*
2. *Competently use a wide variety of office equipment, including computers, peripherals, and other office machines.*
3. *Actively assist in implementing general office procedures, including records management.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES

OFADM 202	[1]	Intermediate Keyboarding 2	2
OFADM 231	[2]	Intermediate Word Processing	3
OFADM 259	[2]	Introduction to Spreadsheet Software	1
OFADM 262	[1]	Introduction to Business Presentation Software	1
OFADM 304	[1]	Professional English for Business	3
OFADM 305	[2]	Records Management	3
OFADM 313	[1]	Skills for the Workplace	3
OFADM 314 *	[2]	Office Procedures & Technologies	3
OFADM 315 **	[2]	Today's Office	2
OFADM 316	[1]	Introduction to Microsoft Outlook	1
OFADM 320	[2]	Telephone Techniques	1
OFADM 330	[1]	Beginning Word Processing	3
OFADM 353	[1]	Introduction to Computers and Windows	1
OFADM 363	[1]	Understanding the Internet	1
OFADM 375	[1]	10-Key on the Computer	1
BUSAD 50	[2]	Business Computations	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 32

**Offered only in fall semester*

***Offered only in spring semester*

CERTIFICATE OF ACHIEVEMENT: **OFFICE ADMINISTRATION**

The Office Administration Certificate Program is designed to prepare students for occupations in the office administration field. Some career possibilities are administrative assistant, executive secretary, office manager, office supervisor, and transcriptionist. Office administration involves the study of office procedures, duties, and practices applicable to many business offices, as well as the development and acquisition of skills necessary for success in these positions. Students learn keyboarding, word processing, records management, human relations, business communication, and math. Word processing, letter composition, and office administration procedures are emphasized to prepare students for the assumption of responsible positions.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Productively work as a team member with people of diverse experiences and backgrounds in a workplace environment.*
2. *Competently communicate in support of a business office, including production and design of complex electronic and paper based correspondence and documents.*
3. *Actively assist in implementing general office procedures, including records management.*
4. *Use the Internet, a wide variety of computer applications and standard business procedures to compute, analyze business performance and solve problems.*
5. *Efficiently perform office-related duties utilizing prioritization and necessary communication skills.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 32-33 UNITS

OFADM 202	[1]	Intermediate Keyboarding 2	2
OFADM 231	[1]	Intermediate Word Processing	3
OFADM 232 *	[2]	Advanced Word Processing and Desktop Publishing	3
OFADM 259	[1]	Introduction to Spreadsheet Software	1
OFADM 260	[2]	Intermediate Spreadsheet Software	1
OFADM 261	[2]	Introduction to Databases	1
OFADM 304	[2]	Professional English for Business	3
OFADM 314 *	[1]	Office Procedures & Technologies	3
OFADM 315 **	[2]	Today's Office	2
OFADM 316	[1]	Introduction to Microsoft Outlook	1
OFADM 320	[1]	Telephone Techniques	1
OFADM 363	[1]	Understanding the Internet	1
OFADM 375	[1]	10-Key on the Computer	1
CMPGR 215	[2]	Business Presentation Graphics	3
BUSAD 210	[2]	Business Communication	3
BUSAD 50	[1]	Business Computations	3 OR
BUSAD 310	[1]	Bookkeeping 1	3 OR
BUSAD 201	[1]	Financial Accounting	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 32-33

**Offered only in fall semester*

***Offered only in spring semester*

CERTIFICATE OF ACHIEVEMENT: **OFFICE COMPUTER APPLICATIONS**

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Use the Internet and a wide variety of computer applications to compute, to analyze, and to solve business problems.*
2. *Demonstrate the ability to competently use a wide variety of office equipment, including computers, peripherals, and other office machines.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 15-16 UNITS

OFADM 301	[1]	Beginning Keyboarding	1.5 AND
OFADM 302	[2]	Beginning Document Processing	1.5 OR
OFADM 202	[2]	Intermediate Keyboarding 2	2
OFADM 231	[2]	Intermediate Word Processing	3
OFADM 259	[1]	Introduction to Spreadsheet Software	1
OFADM 260	[2]	Intermediate Spreadsheet Software	1
OFADM 261	[2]	Introduction to Databases	1
OFADM 262	[2]	Introduction to Business Presentation Software	1
OFADM 316	[2]	Introduction to Microsoft Outlook	1
OFADM 305	[1]	Records Management	3
OFADM 353	[1]	Introduction to Computers and Windows	1
OFADM 363	[1]	Understanding the Internet	1

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 15-16

CERTIFICATE OF ACHIEVEMENT: **OFFICE SUPPORT**

The Office Support Certificate of Achievement is designed for students desiring to meet entry level qualifications for office support positions which require keyboarding, telephone techniques, business document formatting, document organization, time management, word processing skills, Internet and e-mail protocol, and spreadsheet design.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate the ability to competently use a wide variety of office equipment, including computers, peripherals, and other office machines.*
2. *Actively assist in implementing general office procedures, including records management.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 18-19 UNITS

OFADM 301	[1]	Beginning Keyboarding	1.5 AND
OFADM 302	[2]	Beginning Document Processing	1.5 OR
OFADM 202	[1]	Intermediate Keyboarding 2	2
OFADM 231	[2]	Intermediate Word Processing	3
OFADM 259	[2]	Introduction to Spreadsheet Software	1
OFADM 262	[2]	Introduction to Business Presentation Software	1
OFADM 304	[1]	Professional English for Business	3
OFADM 305	[1]	Records Management	3
OFADM 314 *	[2]	Office Procedures & Technologies	3
OFADM 316	[1]	Introduction to Microsoft Outlook	1
OFADM 320	[2]	Telephone Techniques	1

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....18-19

**Offered only in fall semester*

CERTIFICATE OF ACHIEVEMENT: **RECORDS MANAGEMENT/DATA ENTRY SPECIALIST**

The Records Management/Data Entry Specialist Certificate of Achievement is designed for students desiring to meet entry-level requirements for records management and data entry employees: keyboarding, filing rules and their applications, manual and computer filing system development, telephone techniques, time management skills, ten-key data entry and math calculations.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Actively assist in implementing general office procedures, including records management.*
2. *Efficiently perform office-related duties utilizing prioritization and necessary communication skills.*
3. *Utilize computer software to manage data effectively.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 15-16 UNITS

OFADM 301	[1]	Beginning Keyboarding	1.5 AND
OFADM 302	[2]	Beginning Document Processing	1.5 OR
OFADM 202	[1]	Intermediate Keyboarding 2	2
OFADM 304	[1]	Professional English for Business	3
OFADM 305	[2]	Records Management	3
OFADM 313	[1]	Skills for the Workplace	3
OFADM 261	[2]	Introduction to Databases	1
OFADM 375	[2]	10-Key on the Computer	1
BUSAD 300	[2]	Machine Calculation	2

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD.....15-16

Pharmacy Technician

Contact Workforce Development at (209) 575-6885

Philosophy
PROGRAM
(209) 575-6129

A.A.-T DEGREE: PHILOSOPHY

Philosophy is the study of fundamental questions such as: What is ultimately real? What is the good life? Does God exist? The Associate in Arts in Philosophy for Transfer (AA-T in Philosophy) Degree includes lower division coursework that is required for transfer and is an excellent way to refine one's critical reasoning and rational decision-making skills, making it a useful degree for a wide variety of career goals. The Associate in Arts in Philosophy for Transfer (AA-T in Philosophy) Degree includes courses that help students to construct arguments, to read classic texts carefully, and to formulate crucial questions while providing a deeper grasp of our intellectual heritage.

The Associate in Arts in Philosophy for Transfer (AA-T in Philosophy) Degree is intended for students who plan to complete a bachelor's degree in Philosophy at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN PHILOSOPHY FOR TRANSFER (AA-T IN PHILOSOPHY) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Read and analyze key arguments found in primary texts from the philosophical tradition.*
2. *Construct a clearly written argument employing various philosophical tools, including consideration of counter-arguments, in the critical evaluation of a philosophical primary text.*
3. *Explain and apply deductive and inductive reasoning, critical thinking, and basic methods of formal logic.*
4. *Describe the historical development of philosophical ideas from ancient to modern philosophy, including terms employed in the discussion of these developments on fundamental questions that include topics of reality, knowledge, and value.*

PROGRAM REQUIREMENTS

To receive an Associate of Arts for transfer Degree in Philosophy, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

REQUIRED COURSES - SELECT TWO (6 UNITS)

PHILO 103	[NP]	Symbolic Logic	3
PHILO 101	[NP]	Philosophy	3 OR
PHILO 111	[NP]	Ethics: Theory and Application	3

LIST A - SELECT ONE (3 UNITS)

Any Course from Required Core not already used			3
PHILO 120	[NP]	History of Philosophy: Ancient	3
PHILO 121	[NP]	History of Philosophy: Modern	3
PHILO 105	[NP]	Critical Reasoning and Analytic Writing	3
PHILO 107	[NP]	Philosophy of Science	3
PHILO 123	[NP]	Twentieth Century Philosophy	3
PHILO 130	[NP]	Political Theory	3

LIST B - SELECT TWO (6 UNITS)

Any course from List A not already used			3
HIST 104	[NP]	Western Civilization to 1650	3
HIST 105	[NP]	Western Civilization Since 1650	3
PHILO 115	[NP]	Religion: Philosophical and Comparative Inquiry	3

LIST C - SELECT ONE (3 UNITS)

Any course from List A or B not already used			3
PHILO 113	[NP]	Philosophy and Art	3
PHILO 135	[NP]	Environmental Ethics	3
PHILO 140	[NP]	Philosophy and Film	3

TOTAL UNITS FOR THE MAJOR 18

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6-18
GENERAL EDUCATION (CSU GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE UNITS)	11-21

TOTAL DEGREE UNITS (MAXIMUM) 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

Phlebotomy

Contact Workforce Development at (209) 575-6885

Physical Education (Kinesiology) PROGRAM
(209) 575-6269

A.A.-T DEGREE: KINESIOLOGY

The Associate in Arts in Kinesiology for Transfer Degree is intended for students who plan to complete a bachelor's degree in Kinesiology or related subjects (Physical Education, Sport Science, Exercise Physiology, etc.) at a CSU campus. This degree focuses on practical application of the science-based study of movement. Students who complete the degree will be able to demonstrate an understanding of how the body systems and structures work together to allow movement to occur.

Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU that does not accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Relate basic motor skills and patterns to concepts, theories, and methods common to Kinesiology.*
2. *Consider how the body systems and structures work together to allow movement to occur.*
3. *Assess measurements and types of movement to evaluate individual performance.*
4. *Enter a University level Kinesiology program.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN KINESIOLOGY FOR TRANSFER (AA-T IN KINESIOLOGY) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better. A "P" (Pass).

REQUIRED CORE

PE 124	[NP]	Introduction to Kinesiology	3
ANAT 125	[NP]	Human Anatomy	4
PHYSO 101	[NP]	Introductory Human Physiology	4

MOVEMENT BASED COURSES - (MINIMUM 3) SELECT A MAXIMUM OF ONE (1) COURSE FROM ANY THREE (3) OF THE FOLLOWING AREAS FOR A MINIMUM OF THREE (3) UNITS.

AQUATICS

PEC 108	[NP]	Deep Water Aerobics	1
PEC 168	[NP]	Beginning Swimming	1
PEC 169	[NP]	Intermediate Swimming	1
PEC 170	[NP]	Advanced Swimming	1
PEC 171	[NP]	Swim for Fitness	1

FITNESS

PEC 128	[NP]	Aerobics	1
PEC 140	[NP]	Exercise for Fitness	1
PEC 148	[NP]	Yoga for Better Health	1
PEC 187	[NP]	Pilates for Fitness	1
PEC 195	[NP]	Weight Training	1

INDIVIDUAL SPORTS

PEC 143	[NP]	Beginning Golf	1
PEC 175	[NP]	Beginning Tennis	1
PEC 176	[NP]	Intermediate Tennis	1
PEC 177	[NP]	Advanced Tennis	1

TEAM SPORTS

PEC 183	[NP]	Volleyball	1
PEC 184	[NP]	Power Volleyball	1
PEC 186	[NP]	Intermediate Volleyball	1
PEM 141A	[NP]	Advanced Touch Football	1

LIST A: (SELECT TWO)

BIO 116	[NP]	Biology: A Human Perspective	4
CHEM 143	[NP]	Introduction to College Chemistry	4 OR
CHEM 101	[NP]	General Chemistry	5
HE 101	[NP]	Emergency Medical Response; CPR Pro/Healthcare Provider	3
MATH 134	[NP]	Elementary Statistics	4 OR
SOCIO 105	[NP]	Introduction to Statistics for the Social & Beh Sciences	3

TOTAL UNITS IN THE A.A.-T MAJOR....20-23
TOTAL UNITS THAT MAY BE DOUBLE-COUNTED 3-10
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS 37-39
ELECTIVE (CSU TRANSFERABLE UNITS) 1-12
TOTAL UNITS REQUIRED FOR A.A.-T DEGREE MAXIMUM 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for the Associate in Arts in Kinesiology for Transfer Degree.*

A.A. DEGREE: KINESIOLOGY

(Formerly listed as A.A. Degree: Physical Education)

The purpose of the Kinesiology major is to provide a general program of study that focuses on physical education, fitness and sport. The program will develop the student's understanding of how recreation, leisure activity, and sport impact individuals from a physical, sociological, and psychological perspective. Students will be introduced to exercise and nutrition guidelines, basic athletic injury prevention and treatment, organization of fitness and sport management programs, and emergency medical skills, including CPR.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Develop and implement safe, comprehensive physical activity protocols.*
2. *Demonstrate competence in the major concepts, theoretical perspectives, and current research dealing with physical activity and sport.*
3. *Identify and apply basic rules and strategies of various physical activities.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 15 UNITS

HE 101	[NP]	Emergency Medical Response; CPR Pro/Healthcare Provider	3
PE 100	[NP]	Introduction to Physical Education	3
PE 108	[NP]	Care and Prevention of Athletic Injuries	3
PE 109	[NP]	Exercise and Sport Psychology	3
PE 124	[NP]	Introduction to Kinesiology	3

ELECTIVE COURSES - COMPLETE 6 UNITS

PE 101	[NP]	Basketball Theory	2
PE 102	[NP]	Offensive Football Theory	2
PE 103	[NP]	Track and Field Team Concepts	2
PE 104	[NP]	Wrestling Theory	1
PE 105	[NP]	Defensive Football Theory	2
PE 106	[NP]	Offensive Baseball Theory	2
PE 107	[NP]	Defensive Baseball Theory	2
PE 108	[NP]	Care and Prevention of Athletic Injuries	3
PE 110	[NP]	Officiating: Spring Sports	3
PE 111	[NP]	Application of Sports Medicine	3
PE 113	[NP]	Offensive/Defensive Softball Theory	2
PE 114	[NP]	Cross Country Concepts	2
PE 115	[NP]	Officiating: Fall Sports	3
PE 116	[NP]	Football Team Play Concepts	2
PE 120	[NP]	Sports and Society	3
PE 121	[NP]	Coaching Effectiveness	3
PE 122	[NP]	Adapted Physical Education Theory and Lab	3
PE 126	[NP]	Introduction to Sport Management	3
PE 130	[NP]	Personal Trainer Health Fitness Instructor	3
REC 110	[NP]	Social Recreation Leadership	3
HE 118	[NP]	Exercise and Nutrition for Healthy Living	3

PE ACTIVITY CLASSES: COMPLETE 1-3 UNITS

DANCE 111	[NP]	Modern Dance 1	1
DANCE 112	[NP]	Modern Dance 2	1
DANCE 113	[NP]	Modern Dance 3	1
DANCE 121	[NP]	Ballet 1	1
DANCE 122	[NP]	Ballet 2	1
DANCE 123	[NP]	Ballet 3	1
DANCE 124	[NP]	Ballet 4	1
DANCE 131	[NP]	Jazz 1	1
DANCE 132	[NP]	Jazz 2	1
DANCE 133	[NP]	Jazz 3 Intermediate/Advanced	1
DANCE 141	[NP]	Hip Hop	1
PEA 104	[NP]	Adapted Strength Development	1
PEA 106	[NP]	Functional Water Exercise	1
PEA 107	[NP]	Adapted Swimming	1
PEA 108	[NP]	Adapted Aquatics	1
PEA 119	[NP]	Adapted Sports	1
PEC 102	[NP]	Water Aerobics	1
PEC 108	[NP]	Deep Water Aerobics	1
PEC 128	[NP]	Aerobics	1
PEC 131	[NP]	Aerobics 2	1
PEC 135	[NP]	Springboard Diving	1
PEC 140	[NP]	Exercise for Fitness	1
PEC 142	[NP]	Exercise For Fitness 2	1
PEC 143	[NP]	Beginning Golf	1
PEC 144	[NP]	Intermediate Golf	1
PEC 145	[NP]	Advanced Golf	1
PEC 147	[NP]	Gymnastics	1
PEC 148	[NP]	Yoga for Better Health	1
PEC 157	[NP]	Advanced Judo	1
PEC 159	[NP]	Fall Spirit Leadership Training	2
PEC 160	[NP]	Spring Spirit Leadership Training	1
PEC 162	[NP]	Aikido	1
PEC 163	[NP]	Aikido 2 Intermediate	1
PEC 164	[NP]	Self-Defense	1
PEC 165	[NP]	Judo	1
PEC 168	[NP]	Beginning Swimming	1
PEC 169	[NP]	Intermediate Swimming	1
PEC 170	[NP]	Advanced Swimming	1
PEC 171	[NP]	Swim for Fitness	1
PEC 175	[NP]	Beginning Tennis	1
PEC 176	[NP]	Intermediate Tennis	1
PEC 177	[NP]	Advanced Tennis	1
PEC 178	[NP]	Tournament Tennis	1
PEC 179	[NP]	Track and Field	1
PEC 182	[NP]	Training for Distance Running	1
PEC 183	[NP]	Volleyball	1
PEC 184	[NP]	Power Volleyball	1
PEC 186	[NP]	Intermediate Volleyball	1
PEC 187	[NP]	Pilates for Fitness	1
PEC 190	[NP]	Advanced Water Polo	1
PEC 191	[NP]	Power Lifting	1
PEC 192	[NP]	Pilates 2	1
PEC 195	[NP]	Weight Training	1
PEC 197	[NP]	Advanced Weight Training	1
PEM 108	[NP]	Baseball	1
PEM 112	[NP]	Beginning Basketball	1
PEM 113	[NP]	Intermediate Basketball	1
PEM 114	[NP]	Advanced Basketball	1
PEM 140	[NP]	Touch Football and Kanaki	1
PEM 141X,A	[NP]	Advanced Touch Football	0.5, 1
PEM 162	[NP]	Soccer	1
PEM 163	[NP]	Soccer 2	1
PEM 165	[NP]	Soccer 3	1
PEM 196	[NP]	Advanced Wrestling	1
PEVM 100	[NP]	Varsity Baseball	3
PEVM 105	[NP]	Men's Varsity Basketball (Fall)	2
PEVM 106	[NP]	Men's Varsity Basketball (Spring)	1

PEVM 110	[NP]	Men's Varsity Cross-Country	3
PEVM 115	[NP]	Varsity Football	3
PEVM 120	[NP]	Men's Varsity Golf	3
PEVM 122	[NP]	Men's Varsity Soccer	3
PEVM 125	[NP]	Men's Varsity Swimming and Diving	3
PEVM 130	[NP]	Men's Varsity Tennis	3
PEVM 135	[NP]	Men's Varsity Track and Field	3
PEVM 140	[NP]	Men's Varsity Water Polo	3
PEVM 145	[NP]	Varsity Wrestling	3
PEVM 147XABC	[NP]	Training and Conditioning for Athletics	0.5 - 3
PEVW 100	[NP]	Women's Varsity Basketball (Fall)	2
PEVW 101	[NP]	Women's Varsity Basketball (Spring)	1
PEVW 102XABC	[NP]	Training and Conditioning for Basketball	0.5 - 3
PEVW 103	[NP]	Women's Varsity Cross-Country	3
PEVW 104XABC	[NP]	Training and Conditioning for Cross Country	0.5 - 3
PEVW 115	[NP]	Women's Varsity Golf	3
PEVW 116XABC	[NP]	Training and Conditioning for Golf	0.5 - 3
PEVW 120	[NP]	Women's Varsity Softball	3
PEVW 121XABC	[NP]	Training and Conditioning for Softball	0.5 - 3
PEVW 123	[NP]	Women's Varsity Soccer	3
PEVW 124XABC	[NP]	Training and Conditioning for Soccer	0.5 - 3
PEVW 125	[NP]	Women's Varsity Swimming and Diving	3
PEVW 130	[NP]	Women's Varsity Tennis	3
PEVW 135	[NP]	Women's Varsity Track and Field	3
PEVW 136XABC	[NP]	Training and Conditioning for Track and Field	0.5 - 3
PEVW 140	[NP]	Women's Varsity Volleyball	3
PEVW 141XABC	[NP]	Training and Conditioning for Volleyball	0.5 - 3
PEVW 145	[NP]	Women's Varsity Water Polo	3
PEVW 147XABC	[NP]	Training and Conditioning for Athletics	0.5 - 3
PEW 163	[NP]	Soccer 2	1
PEW 164	[NP]	Women's Indoor-Outdoor Soccer	1
PEW 166	[NP]	Women's Self Defense	1
PEW 167	[NP]	Women's Beginning Judo	1
PEW 180	[NP]	Women's Softball	1
PEW 181	[NP]	Defensive Softball	1
PEW 192	[NP]	Women's Weight Training	1

TOTAL UNITS IN A.A. MAJOR 22-24

Physics
PROGRAM
(209) 575-6173

A.S.-T DEGREE:
PHYSICS

The Associate in Science in Physics for Transfer (A.S.-T in Physics) Degree includes lower division coursework that is required for transfer. This program is designed to prepare students who wish to transfer to a California State University campus to complete a bachelor's degree in physics, physics education or a related field of study. It will educate the student in applying the scientific method to collect and analyze data in forming conclusions, to verify physical principles through measurement and experimentation, to solve problems and to predict outcomes in nature using physical laws, and to state and apply physical concepts to explain phenomena encountered in our everyday world.

The Associate in Science in Physics for Transfer (A.S.-T in Physics) is intended for students who plan to complete a bachelor's degree in Physics at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. The Associate in Science in Physics for Transfer (A.S.-T in Physics) may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Use the Scientific Method to collect and analyze data in forming conclusions and to verify physical principles through measurement and experimentation.*
2. *Solve problems and predict outcomes in nature using physical laws.*
3. *State and apply physical concepts to explain phenomena encountered in our everyday world.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN SCIENCE IN PHYSICS FOR TRANSFER (A.S.-T IN PHYSICS) DEGREE:

1. *Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
   - *(A) The California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.*
   - *(B) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.*
2. *Obtainment of a minimum grade point average of 2.0.*

*ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.

REQUIRED COURSES – COMPLETE 24 UNITS

PHYS 101	[NP]	General Physics: Mechanics	4 AND
PHYS 102	[NP]	General Physics: Waves, Thermodynamics, & Optics	4 AND
PHYS 103	[NP]	General Physics: Electricity, Magnetism, & Modern Physics	4
MATH 171	[NP]	Calculus: First Course	4
MATH 172	[NP]	Calculus: Second Course	4
MATH 173	[NP]	Calculus: Third Course	4

TOTAL UNITS IN THE A.S.-T MAJOR 24

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	7
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE UNITS)	4-6

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

Plant Science
PROGRAM
(209) 575-6200

A.S.-T DEGREE:
AGRICULTURE PLANT SCIENCE

The Associate in Science in Agriculture Plant Science for Transfer Degree (AS-T in Agriculture Plant Science) will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Agriculture Plant Science. Potential careers in the Agriculture Plant Science field include: Pest Control Advisor (PCA), crop production specialist, farm management positions, landscape design, quality control manager, county and governmental compliance inspector, sales and marketing of seed and other crop protecting agents.

The Associate in Science in Agriculture Plant Science for Transfer Degree (AS-T in Agriculture Plant Science) is intended for students who plan to complete a bachelor's degree in Agriculture Plant Science at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate practical skills in plant science in the areas of management and production of crops and horticultural plants commonly grown in California.*
2. *Identify major soil types and classes found in the primary growing areas of California and describe characteristics of these soil types.*
3. *Recognize crops produced in California and explain management techniques for each specific crop.*
4. *Explain the role of government agencies in regulating and monitoring various factors associated with crop production.*
5. *Identify and explain the use of various types of irrigation systems used in California.*

PROGRAM REQUIREMENTS

The following is required for the Associate in Science in Agriculture Plant Science for Transfer (AS-T in Agriculture Plant Science) Degree:

- 60 semester or 90 quarter CSU-transferable units.
- the California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
- a minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.
- obtainment of a minimum grade point average (GPA) of 2.0.
- earn a grade of "C or better" or a "P" for pass/no pass in all courses required for the major or area of emphasis

REQUIRED CORE: 17-18 UNITS

NR 200	[NP]	Soils	3
CHEM 143	[NP]	Introductory College Chemistry	4 OR
CHEM 101	[NP]	General Chemistry 1	5
AGEC 210	[NP]	Elements of Agricultural Economics	3 OR
ECON 102	[NP]	Principles of Microeconomics	3
MATH 134	[NP]	Elementary Statistics	4
PLSC 200	[NP]	Introduction to Plant Science	3

LIST A: SELECT 3-5 UNITS

EHS 235	[NP]	Plant Propagation/Production	3
PLSC 235	[NP]	Plant Propagation	3
EHS 201	[NP]	Plant Identification & Usage 1	3
EHS 202	[NP]	Plant Identification & Usage 2	3
CHEM 112	[NP]	Organic Chemistry 1	5

LIST B: SELECT 0-9 UNITS

PLSC 250	[NP]	Plant Nutrition and Fertilizer	3
AGM 215	[NP]	Machinery Management	3
AGM 235	[NP]	Irrigation and Drainage	3
AGEC 200	{NP]	Agricultural Accounting and Analysis	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR 20-32

DOUBLE-COUNTED UNITS	13
GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	2-16

TOTAL UNITS REQUIRED FOR A.S.-T DEGREE 60

* *Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for the Associate in Science in Agriculture Plant Science for Transfer degree.*

A.S. DEGREE: CROP SCIENCE

The student acquires skills in production of the common row and field crops grown in the Central Valley. Specific skills are emphasized in seedbed preparation, planting, fertilizing, weed control, pest management, harvesting, and marketing. Training leads to farming as well as employment in allied businesses such as fertilizer or agricultural chemical companies, seed companies, processing companies, and other related industries. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Employ the scientific method to solve problems in the laboratory and in the field.*
2. *Practice safe work habits in an employment setting, including handling and storage of hazardous materials.*
3. *Demonstrate sufficient mastery of general plant science skills for technical employment in the plant science management industry (agronomy, pomology, viticulture and enology, or oleoculture.*
4. *Apply the principles of ecology, soil science, and plant science to crop management problems.*
5. *Develop integrated pest management programs for specific crops.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2
AG 259A-D **	[1,2,3,4]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

ANSC 200	[1,2,3,4]	Introduction to Animal Science	3
NR 200	[1,2,3,4]	Soils	3
AGM 200	[1,2,3,4]	Introduction to Mechanical Technology	3
AGEC 225	[1,2,3,4]	Agriculture Computer Applications	3 OR
AGEC 210	[1,2,3,4]	Elements of Agricultural Economics	3 OR
AGEC 200	[1,2,3,4]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

PLSC 200	[1,2,3,4]	Introduction to Plant Science	3
PLSC 205	[NP]	Field Crops	3
PLSC 215	[NP]	Vegetable Crops	3
PLSC 250	[NP]	Plant Nutrition and Fertilizer	3

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 6 UNITS

PLSC 255	[NP]	Plant Pest Control	3
PLSC 260	[NP]	Plant Disease Control	3
PLSC 280	[NP]	Weed Control	3
Any course not used in Area III			3

TOTAL UNITS 29

**Required*
***Internship/Work Experience must be Agriculture related*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

A.S. DEGREE: FRUIT SCIENCE

The student will develop skills and knowledge in managing a horticultural fruit production operation. Training in this course includes practical horticultural skills such as propagation, pruning, thinning, planting, and management skills, such as supervision of labor, selecting insurance, credit, orchard planning, spray programs, and calendar of operation. The program also prepares students for transfer to a four-year college. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply general plant science skills for technical employment in the plant science management industry (pomology, viticulture and enology).*
2. *Apply the principles of ecology, soil science, and plant science to pomology and viticulture management problems.*
3. *Develop integrated pest management programs for specific crops.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2
AG 259A-D**	[1,2,3,4]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

ANSC 200	[1,2,3,4]	Introduction to Animal Science	3
NR 200	[1,2,3,4]	Soils	3
AGM 200	[1,2,3,4]	Introduction to Mechanical Technology	3
AGEC 225	[1,2,3,4]	Agriculture Computer Applications	3 OR
AGEC 210	[1,2,3,4]	Elements of Agricultural Economics	3 OR
AGEC 200	[1,2,3,4]	Agricultural Accounting and Analysis	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

COMPLETE 3 UNITS

PLSC 230	[NP]	Fruit Science	3

COMPLETE 6 UNITS

PLSC 200	[1,2,3,4]	Introduction to Plant Science	3
PLSC 241	[NP]	Viticulture	3
PLSC 255	[NP]	Plant Pest Control	3

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 6 UNITS

PLSC 235	[NP]	Plant Propagation/ Production	3
PLSC 250	[NP]	Plant Nutrition and Fertilizer	3
PLSC 260	[NP]	Plant Disease Control	3
PLSC 280	[NP]	Weed Control	3
Any course not used in Area III			3

TOTAL UNITS 29

**Required*
***Internship/Work Experience must be Agriculture related*
Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

A.S. DEGREE:
SOIL SCIENCE

In this program the student will develop skills and knowledge for entry-level employment in fields of soil and water management. These fields may include conservation, analysis, survey and farm management, as well as related fields such as range management, hydrology, irrigation, drainage, fertilization, and rural and urban planning. This program will also prepare the student for transfer to a university. Contact the division office in the Agriculture Building for advising assistance.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Employ the scientific method to solve problems in the laboratory and in the natural environment.*
2. *Apply the principles of ecology, soil science, silviculture, cartography, and facilities maintenance and development to sustainable resources management problems.*
3. *Employ environmental stewardship as an operational philosophy for resource management, public education of natural resources, and wildlife management.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below.

I. AGRICULTURE CAREER COURSES - COMPLETE 5 UNITS

AG 115 *	[1]	Introduction to Agricultural Education & Careers	1
AG 249 **	[4]	Agriculture Internship	2 OR
AG 259A-D **	[NP]	Agricultural Work Experience	1 - 4

II. AGRICULTURE SCIENCE BREADTH COURSES - COMPLETE 9 UNITS

PLSC 200	[NP]	Introduction to Plant Science	3
ANSC 200	[NP]	Introduction to Animal Science	3
AGM 200	[NP]	Introduction to Mechanical Technology	3
AGEC 200	[3,4]	Agricultural Accounting and Analysis	3
AGEC 210	[3,4]	Elements of Agricultural Economics	3
AGEC 225	[NP]	Agriculture Computer Applications	3

III. AGRICULTURE MAJOR COURSES - COMPLETE 9 UNITS

COMPLETE 3 UNITS

NR 200	[2,3,4]	Soils	3

COMPLETE 6 UNITS

AGM 235	[2,3,4]	Irrigation and Drainage	3
PLSC 250	[2,3,4]	Plant Nutrition and Fertilizer	3
PLSC 230	[NP]	Fruit Science	3
PLSC 205	[NP]	Field Crops	3
PLSC 241	[NP]	Viticulture	3

IV. AGRICULTURE MAJOR ELECTIVES - COMPLETE 5-6 UNITS

NR 222	[NP]	Native Tree and Shrub Identification	3
EHS 210	[NP]	Introduction to Environmental Horticulture Science	3
PLSC 255	[NP]	Plant Pest Control	3
PLSC 260	[2,3,4]	Plant Disease Control	3
AGGE 146	[NP]	Agriculture, Environment and Society	3
Any course not already taken in Area III			3

TOTAL UNITS 28-29

**Required*

***Internship/Work Experience must be Agriculture related*

Note: For Section I: Agriculture Career Courses, students must take AG 115. Students must complete an additional 4 units in the section by taking AG 259D, or a combination of AG 259A-C, or a combination of AG 249 and AG 259A-B.

Political Science
PROGRAM
(209) 575-6129

A.A.-T DEGREE: POLITICAL SCIENCE

Political Science is a practical liberal arts major. Students who pursue the Associate in Arts in Political Science for Transfer (AA-T in Political Science) Degree will analyze politics and government at the local, state, national, and global levels. Students will also acquire substantive knowledge of American Politics, Political Theory, Comparative Politics, and International Relations. The study of Political Science provides students with the opportunity to explore how individuals can make a difference in their political communities. The Associate in Arts in Political Science for Transfer (AA-T in Political Science) Degree is intended for students who plan to complete a bachelor's degree in Political Science at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN POLITICAL SCIENCE FOR TRANSFER (AA-T IN POLITICAL SCIENCE) DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Use critical and creative thinking to address major political problems.*
2. *Analyze key concepts and important theories in political science.*
3. *Effectively search for, interpret, and critique political science literature.*
4. *Formulate and communicate thoughtful opinions about governmental systems, political institutions, laws, and public policies.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts for Transfer degree in this major, the student must complete the requirements detailed in the Transfer Curriculum Pathway which includes completion of the requirements below:

REQUIRED CORE: (3 UNITS)

POLSC 101	[NP]	American Politics	3

LIST A: SELECT THREE (9 UNITS)

POLSC 130	[NP]	Political Theory	3
POLSC 140	[NP]	Comparative Politics	3
POLSC 110	[NP]	International Relations	3

LIST B - SELECT TWO (6 UNITS)

Any course from List A not already used			3
POLSC 102	[NP]	The Constitution and Rights of Persons	3
POLSC 120	[NP]	California Politics and Problems	3
POLSC 131	[NP]	American Political Thought	3
POLSC 180	[NP]	Human Rights	3
COMM 130	[NP]	Intercultural Communication	3
ECON 101	[NP]	Principles of Macroeconomic	3
ECON 102	[NP]	Principles of Microeconomics	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 18

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	6-9
GENERAL EDUCATION (CSU-GE or IGETC) UNIT	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	9-14

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

Psychology
PROGRAM
(209) 575-6129

A.A.-T DEGREE:
PSYCHOLOGY

This program is designed to prepare students who wish to transfer to a CSU and major in Psychology. This program will provide students with an alignment of courses required for transfer and a cohesive group of courses in the area of Psychology. Courses such as general psychology, research methods in psychology, and introduction to neuroscience will enable the student to demonstrate ability to engage in critical thinking.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN PSYCHOLOGY FOR TRANSFER DEGREE (AA-T IN PSYCHOLOGY):

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better. A "P" (Pass) grade is not an acceptable grade for courses in the major

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.*
2. *Understand and apply psychological principles to personal, social, and organizational issues.*
3. *Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.*
4. *Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.*

PROGRAM REQUIREMENTS

To receive an Associate of Arts for transfer Degree in Psychology, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway. All courses must be completed with a C or better or "P" (Pass).

REQUIRED: (10 UNITS)

MATH 134	[2]	Elementary Statistics	4
PSYCH 101	[1]	General Psychology	3
PSYCH 102	[2]	Research Methods	3

LIST A: SELECT ONE (3-4 UNITS)

BIO 101	[NP]	Biological Principles	4 OR
BIO 111	[NP]	General Biology	4 OR
BIO 116	[NP]	Biology: A Human Perspective	4
PSYCH 103	[2]	Introduction to Neuroscience	3

LIST B: SELECT ONE

Any LIST A course not already used			3
PSYCH 104	[2]	Introduction to Social Psychology	3
PSYCH 141	[2]	Human Lifespan Development	3

LIST C: SELECT ONE

PSYCH 105	[2]	Abnormal Psychology	3
PSYCH 110	[NP]	Human Sexualities	3
PSYCH 111	[2]	Psychology of Gender	3
PSYCH 118	[2]	Drugs and Human Behavior	3
PSYCH 130	[NP]	Personal Adjustment	3
Any List A or B course not already used			3

TOTAL UNITS IN THE A.A.-T MAJOR 19-21

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	15-18
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE) UNITS	17-20

TOTAL UNITS FOR A.A.-T DEGREE (MAXIMUM) 60

**Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

Psychosocial Rehabilitation PROGRAM
(209) 575-6129

SKILLS RECOGNITION:
PSYCHOSOCIAL REHABILITATION

The Psychosocial Rehabilitation (PSR) Program comes from the emerging need in the human services field to recruit and hire qualified persons to provide services for people who have mental health problems, including consumers and family members as employees in the mental health system. Completion of the Psychosocial Rehabilitation Program will provide the Skills Recognition older with a core curriculum of essential skills necessary for jobs in the human services field and provide the nine units of college credit necessary to sit for the national test-based certification exam, enabling people to become Certified Psychosocial Rehabilitation Practitioners. This core set of courses not only provides a basic education for people entering the human services profession but also provides training and growth opportunities for existing human service employees. In addition, this Skills Recognition will serve as another step in an educational and career ladder leading to a Human Services Skills Recognition and/or Degree. All coursework will be applicable as electives and/or meet the requirements for the Human Services Degree at MJC.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Examine and describe psychosocial rehabilitation, family systems, and historical perspectives as it relates to the public mental health movement.*
2. *Describe and demonstrate effective communication, body language, and written abilities with children, consumers, or families.*
3. *Analyze the impact of stigma, culture, and various practice models in psychosocial rehabilitation.*
4. *Classify various theoretical philosophies, biology, co-occuring disorders, environmental or psychosocial stressors, and the relation to psychosocial rehabilitation practice.*
5. *Conduct a basic assessment, interview, intervention, referral, individual and or group counseling session with individuals that have a severe and persistent mental illness.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 9 UNITS

HUMSR 142	[NP]	Introduction to Psychosocial Rehabilitation	3
HUMSR 143	[NP]	Psychosocial Rehabilitation Practice	3
HUMSR 144	[NP]	Human Services Practicum	1
HUMSR 145ABD	[NP]	Community Agency Practicum	1 - 4
HUMSR 146	[NP]	Psychosocial Rehabilitation with Children/Families	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 9

Public Health Science
PROGRAM
(209) 575-6269

A.S.-T DEGREE:
PUBLIC HEALTH SCIENCE

The Associate in Science in Public Health Science for Transfer degree incorporates a multi-dimensional approach to health, including the physical, psychological, behavioral, and social aspects. Students will learn about public health from an individual and societal perspective, including risk factors for disease and disability, behavior change skills and strategies, statistical analysis, and public health strategies. The Associate in Science in Public Health Science for Transfer is intended for students who plan to complete a bachelor's degree in Public Health Science or Health Science at a CSU campus. Students completing the Associate in Science in Public Health Science for Transfer degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept the Associate in Science in Public Health Science for Transfer degree will be required to complete not more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Utilize a multi-dimensional approach to public health, incorporating physical, psychological, behavioral, and social health.*
2. *Examine individual and societal health behaviors and how they influence public health.*
3. *Identify, select, and implement behavior change skills and strategies to influence public health within your community.*
4. *Transfer to a university level Public Health Science Program.*

PROGRAM REQUIREMENTS

The following is required for the A.S.-T Degree in Public Health Science for transfer:

1. *Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:*
   - *(A) The California State University-General Education-Breadth pattern (CSU GE-Breadth); OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern.*
   - *(B) A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district.*
2. *Obtainment of a minimum grade point average of 2.0.*

   **ADTs also require that students must earn a C or better or a "P" (Pass) in all courses required for the major or area of emphasis.*

REQUIRED CORE: COMPLETE 29-30 UNITS

HE 110	[NP]	Healthful Living	3
HE 112	[NP]	Introduction to Public Health	3
MATH 134	[NP]	Elementary Statistics	4
BIO 116	[NP]	Biology: A Human Perspective	4 OR
BIO 111	[NP]	General Biology	4
CHEM 143	[NP]	Introductory College Chemistry	4 or
CHEM 101	[NP]	General Chemistry 1	5
PSYCH 101	[NP]	General Psychology	3
ANAT 125	[NP]	Human Anatomy	4
PHYSO 101	[NP]	Introductory Human Physiology	4

LIST A: SELECT ONE (3 UNITS)

HE 114	[NP]	Health and Social Justice	3
HE 115	[NP]	Drugs, Health, and Society	3
FDNTR 219	[NP]	Introduction to Nutrition Science	3

TOTAL UNITS REQUIRED IN A.S.-T MAJOR.....32-33

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	5
GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
ELECTIVES (AS NEEDED)	3-6

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for this degree.*

Real Estate
PROGRAM
(209) 575-6129

A.S. DEGREE: REAL ESTATE

The Real Estate Program is designed to provide the skills necessary for salespersons and other workers in the real estate field. Courses cover principles and practices of real estate, sales, financing, appraisal, escrow, and legal aspects of real estate. The courses fulfill the state education requirements for the salesperson and/or brokers licensing exams. For additional information on real estate licensing requirements, students should visit the California Bureau of Real Estate at http://www.bre.ca.gov/. Classes are also designed to upgrade the skills of persons already working in the real estate or escrow field(s).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the real estate environment.*
2. *Obtain employment in an entry-level position in the real estate field.*
3. *Identify and use common California real estate practices and basic real estate terminology.*
4. *Meet the education requirement for the basic California real estate agent's and/or salesperson's license exam.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the MJC Associate Degree Requirements in addition to the following coursework. Degrees are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All required courses must be passed with a "C" grade or better. The A.S. in Real Estate includes coursework which fulfills the education requirements for both the California State Real Estate Salesperson and Brokers License Exams. Other licensing requirements can be found at the California Bureau of Real Estate web site at http://www.bre.ca.gov/. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES - COMPLETE 26 UNITS

RLES 380	[1]	Real Estate Principles	3
RLES 381	[2]	Real Estate Practices	3
RLES 382	[2]	Legal Aspects of Real Estate 1	3
RLES 384	[3]	Real Estate Finance	3
RLES 385	[4]	Real Estate Appraisal, Residential	3
RLES 392	[3]	Basic Escrow Procedures	3
BUSAD 201	[2]	Financial Accounting	4
BUSAD 218	[4]	Business Law	4

TOTAL UNITS IN A.S. MAJOR 26

CERTIFICATE OF ACHIEVEMENT: REAL ESTATE BROKER

The Real Estate Program is designed to provide the skills necessary for salespersons and other workers in the real estate field. Courses cover principles and practices of real estate, sales, financing, appraisal, escrow, and legal aspects of real estate. The courses fulfill the state education requirements for the salesperson and/or brokers licensing exams. For additional information on real estate licensing requirements, students should visit the California Bureau of Real Estate at http://www.bre.ca.gov/. Classes are also designed to upgrade the skills of persons already working in the real estate or escrow field(s).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the real estate environment.*
2. *Obtain employment in an entry-level position in the real estate field.*
3. *Identify and use common California real estate practices and basic real estate terminology.*
4. *Meet the education requirement for the basic California real estate agent's and/or salesperson's license exam.*

PROGRAM REQUIREMENTS

Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All required courses must be passed with a "C" grade or better. The Real Estate Certificate includes coursework which fulfills the education requirements for the California State Real Estate Brokers License Exam. Other licensing requirements can be found at the California Bureau of Real Estate web site at http://www.bre.ca.gov/. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES - COMPLETE 26 UNITS

RLES 380	[1]	Real Estate Principles	3
RLES 381	[1]	Real Estate Practices	3
RLES 382	[2]	Legal Aspects of Real Estate 1	3
RLES 384	[1]	Real Estate Finance	3
RLES 385	[2]	Real Estate Appraisal, Residential	3
RLES 392	[2]	Basic Escrow Procedures	3
BUSAD 201	[1]	Financial Accounting	4
BUSAD 218	[2]	Business Law	4

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 26

SKILLS RECOGNITION:
REAL ESTATE SALESPERSON

The Real Estate Program is designed to provide the skills necessary for salespersons and other workers in the real estate field. Courses cover principles and practices of real estate, sales, financing, appraisal, escrow, and legal aspects of real estate. The courses fulfill the state education requirements for the salesperson and/or brokers licensing exams. For additional information on real estate licensing requirements, students should visit the California Bureau of Real Estate at http://www.bre.ca.gov/. Classes are also designed to upgrade the skills of persons already working in the real estate or escrow field(s).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the real estate environment.*
2. *Identify and use common California real estate practices and basic real estate terminology.*
3. *Meet the education requirement for the basic California real estate salesperson's license exam.*

PROGRAM REQUIREMENTS

Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All required courses must be passed with a "C" grade or better. The Real Estate Skills Recognition Certificate includes coursework which fulfills the education requirements for the California State Real Estate Salesperson License Exam. Other licensing requirements can be found at the California Bureau of Real Estate web site at http://www.bre.ca.gov/. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES

RLES 380	[1]	Real Estate Principles	3
RLES 381	[1]	Real Estate Practices	3

ELECTIVE COURSE- COMPLETE ONE

RLES 382	[1]	Legal Aspects of Real Estate 1	3
RLES 384	[1]	Real Estate Finance	3
RLES 385	[1]	Real Estate Appraisal, Residential	3
RLES 392	[1]	Basic Escrow Procedures	3
BUSAD 201	[1]	Financial Accounting	4
BUSAD 218	[1]	Business Law	4

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 9 - 10

Research Skills
NON-CREDIT PROGRAM
(209) 575-6807

CERTIFICATE OF COMPLETION:
RESEARCH SKILLS

The Certificate of Completion in Research Skills is designed to provide students with a foundation in information literacy, critical thinking, ethical use of information, and research. This certificate is intended to improve the research and information literacy skills of students desiring to increase their capacity for gaining employment in today's digital workforce, in their community engagement, and academic settings. Students enrolled in the Research Skills program may use the certification as a means of providing evidence to employers or prospective employers and college instructors of their ability to find, evaluate, and use credible and scholarly information ethically.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Apply information literacy skills to their academic, work, and personal lives.*
2. *Develop a research project from topic development, to source selection and evaluation, to citation of sources using standard citation styles.*
3. *Analyze, synthesize, and apply information practically and ethically.*

PROGRAM REQUIREMENTS

To receive a CDCP Certificate of Completion in Research Skills, students must successfully complete three 2-hour courses culminating in the successful completion of LIBR 903.

REQUIRED COURSES: ALL NON-CREDIT

LIBR 901	[1]	Research Skills 1	0
LIBR 902	[1]	Research Skills 2	0
LIBR 903	[1]	Research Skills 3	0

TOTAL UNITS REQUIRED IN CERTIFICATE OF COMPLETION 0

A.S. Degree: Respiratory Care PROGRAM (209) 575-6362

The MJC Respiratory Care Associate Degree Program is a two-year program designed to prepare students for entrance into the practice of Respiratory Care. Upon completion of the program, graduates are eligible to take the National Board of Respiratory Care Therapist Multiple Choice Examination and the Clinical Simulations Examination allowing them to practice respiratory care nationally. Graduates are also eligible to apply for licensure with the State of California through the Respiratory Care Board for California. The Respiratory Care Program of Modesto Junior College is accredited by the Commission on Accreditation for Respiratory Care (CoARC).

Commission on Accreditation for Respiratory Care

1248 Harwood Road

Bedford, Texas 76021-4244

(817) 283-2835

www.coarc.com

Program expenses vary for each individual. The estimated cost of the Respiratory Care Program is $4500, approximately $2,250 per year, which includes enrollment and materials fees, health clearance, uniforms, books, board exams, and licensure fees. If you would like information on financial aid, call (209) 575-7700.

The MJC Respiratory Care Program begins once a year in August. If you have questions about program information, contact Allied Health, 575-6362 or visit the Allied Health website at www.mjc.edu/alliedhealth and search Respiratory Care Program. For academic advising, contact the Respiratory Care Program Director at 575-6388, the Director of Clinical Education at 575-6381, or the MJC Counseling Office at 575-6080. For information on the pilot Bachelor's Degree Program in Respiratory Care visit:

http://www.mjc.edu/rcbachelors

ELIGIBILITY AND PREPARATION FOR THE RESPIRATORY CARE PROGRAM

- **Admission to Modesto Junior College**
- **High School graduation is highly recommended but is not required.**
- **Transcripts on file in the MJC Enrollment Services.**

All college transcripts must be submitted with the program application to Allied Health, prior to the program application deadline, unless the transcripts are already on file in the MJC Enrollment Services, Student Services Building 102, (209) 575-6853. We will accept hand-carried transcripts that are in a sealed envelope with a school seal.

REQUIRED MATH COMPETENCY FOR ACCEPTANCE INTO THE RESPIRATORY CARE PROGRAM

- Eligibility for entrance into any 100-level MATH course through MJC Assessment process OR
- Score of 3,4, or 5 on AP Exam: Calculus AB or Calculus BC or Statistics
- Completion of MATH 89 or 90 or higher level MATH course, or an equivalent course from another institution with a grade of C or better
- Score of 5 on IB Exam: Mathematics HL

Bachelor's degree holders are considered to have met this requirement.

PROGRAM PREREQUISITES

ANAT 125	[NP]	Human Anatomy	4
PHYSO 101	[NP]	Introductory Human Physiology	4
PSYCH 101	[NP]	General Psychology	3
MATH 89	[NP]	Intermediate Algebra for Non-STEM Majors	4 or
MATH 90	[NP]	Intermediate Algebra for STEM Majors	5
ENGL 101	[NP]	Composition and Reading	3
CHEM 143	[NP]	Introductory College Chemistry	4
MICRO 101	[NP]	Microbiology	4

PROGRAM APPLICATION

Students who have met/completed the requirements above may submit a Respiratory Care Program application during the application period:

February 1-28

Applications are available on the Allied Health website (www.mjc.edu/alliedhealth) during the application period only. Applications may be submitted electronically, in person, or mailed, but must be received in the Allied Health office or postmarked by the application deadline.

SELECTION PROCESS

In order to be fully qualified for admission, applicants must have completed the program prerequisites with a grade of C or better on transcript at the time of application. In the event that there are more qualified applicants than space available, a weighted lottery system will be employed. An applicant's name will be entered an extra time for:

- **SCIENCE GPA** - A grade point average (GPA) for chemistry, anatomy, and physiology of 3.0 or better **OR** a GPA for microbiology, chemistry, anatomy, and physiology of 2.75 or better.
- **VETERAN STATUS** – Copy of Defense Department form (DD214) Honorable discharge required.
- **PREVIOUSLY QUALIFIED APPLICANT** - If during the past three application periods you were a wait-listed applicant who was not selected for the Respiratory Care Program, your name will be entered an additional time for each of these application periods if appropriate.

If the number of fully qualified applicants falls short of the number of available openings, applicants with remaining prerequisites in progress will be accepted on a space available basis once final grades are posted on official transcripts.

ADDITIONAL REQUIREMENTS FOR ACCEPTED APPLICANTS ONLY

Accepted applicants will receive information on the clinical clearance process outlined below.

CLINICAL CLEARANCE

HEALTH CLEARANCE

- A medical history and physical examination completed by a physician, physician's assistant, or nurse practitioner within 6 months prior to program start date.
  The physical must state that the applicant does not have any health conditions that would create a hazard to self, employees, or patients.
- Documentation of required immunizations.
- A negative PPD skin test must be obtained. If a positive reaction is obtained, or has previously been obtained, a chest x-ray must be taken unless medically contraindicated.

BACKGROUND CHECK

All students participating in clinical assignments are required by acute care hospitals to complete a background check and be cleared by the clinical facilities in order to participate in the clinical experience. (See Policy for Imposing Penalties for Denial of Licensure)

DRUG SCREEN

All students participating in clinical assignments will be required to pass a drug screen.

BLS CERTIFICATION

The Respiratory Care Program will offer a Health Care Provider BLS class from the American Heart Association (AHA) for all accepted applicants. Students are required to purchase an AHA BLS for Healthcare textbook.

SCHOLASTIC REQUIREMENTS

• Continuation in the Respiratory Care Program is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course may, upon faculty approval, be repeated. A grade of C or better if required in order to qualify for a Certificate of Completion.

POLICY FOR IMPOSING PENALTIES FOR DENIAL OF LICENSURE

The law provides for denial of licensure for crimes or acts, which may in any way be related to patient care activities, i.e., sex crimes, drug crimes, alcohol or drug abuse, and crimes of violence. In such cases, it is the applicant's responsibility to present sufficient evidence of rehabilitation to the Respiratory Care Board of California prior to taking the licensure examination. If the above violations are only misdemeanors, an in-house review and penalty determination may be performed and fines, warning letters, and/or probation may be issued without denial of a license. The Respiratory Care Board of California will screen applicants individually. Any student considering a career as a Respiratory Therapist who might be denied licensure is advised to consult the Disciplinary Guidelines (California Code of Regulations, 1399.370) published by the Respiratory Care Board of California before entering the program. Further information on disciplinary guidelines may be obtained from:

Respiratory Care Board of California
3750 Rosin Court, Suite 100
Sacramento, CA 95834
(916) 999-2190
(866) 375-0836

A.S. DEGREE: RESPIRATORY CARE

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Evaluate habits, interests, and attitudes which promote lifelong learning.*
2. *Demonstrate knowledge and clinical skill in Respiratory Care.*
3. *Competently perform the duties and functions delegated to registered respiratory care practitioners in a proficient and ethical manner.*
4. *Successfully pass the National Board for Respiratory Care (NBRC) Therapist Multiple Choice Exam(TMC)and Clinical Simulation(CSE) Exam as a Registered Respiratory Care Practitioner(RRT) and be eligible for licensure in the State of California.*

REQUIRED COURSES (RESPIRATORY CARE)

[FIRST SEMESTER]

RSCR 220	[1]	Introduction to Respiratory Care	5
RSCR 222	[1]	Cardiopulmonary Anatomy and Physiology	3
RSCR 230	[1]	Clinical 1	1

[SECOND SEMESTER]

RSCR 224	[2]	Respiratory Care Theory 2	5
RSCR 232	[2]	Clinical 2	3.5
RSCR 240	[2]	Advanced Cardiopulmonary Physiology	4.5

[THIRD SEMESTER]

RSCR 242	[3]	Critical Care Procedures	4.5
RSCR 244	[3]	Neonatal-Pediatric Respiratory Care	2
RSCR 250	[3]	Clinical 3	3.5
RSCR 251	[3]	Neonatal & Pediatric Clinical Practice I	1

[FOURTH SEMESTER]

RSCR 246	[NP]	Current Issues in Respiratory Care	3
RSCR 252	[NP]	Physician Rounds for Respiratory Care	0.5
RSCR 255	[NP]	Clinical 4	4.5
RSCR 257	[NP]	Clinical Preceptorship	2.5

TOTAL UNITS IN A.S. MAJOR 43.5

TOTAL UNITS WITH PREREQUISITE COURSEWORK & RESPIRATORY CARE MAJOR COURSEWORK 69.5-70.5

To earn an Associate in Science degree in Respiratory Care, the student must complete the requirements detailed in the Career Technical Education Pathway-or the University Preparation Pathway in addition to the Respiratory Care coursework. Consult with an advisor for selection of courses. (5.5 units)

TOTAL UNITS REQUIRED IN A.S. DEGREE 75-76

**The Health Education requirement has been waived for all Allied Health certificates and degrees.*

** General education requirements for students planning to enroll in the Bachelor's Degree Program should follow the CSU-GE Transfer Pattern.*

B.S. Degree: Respiratory Care

PROGRAM
(209) 575-6362

The MJC Bachelor's Degree in Respiratory Care is designed to increase the preparation and technical expertise of respiratory care practitioners. Program graduates will be prepared to serve in leadership, education, and case management roles related to patient care in the field of respiratory care. Students will acquire advanced knowledge and skills in neonatal, pediatric, and adult critical respiratory care; management in respiratory care settings, teaching, and research.

PROGRAM OVERVIEW

The MJC Bachelor's Degree Program in Respiratory Care will be delivered in an accelerated format. The required program courses (40 units), will be offered in an 8-week hybrid format which involves a combination of online and face-to-face classwork. Students will attend classes on campus one night each week for the face-to-face portion of the course.

PROGRAM COSTS

Upper division courses for the bachelor's degree will cost $130 per unit. An additional $217 per unit will be assessed for Non-California residents. The total estimated cost is approximately $10,000 less than a baccalaureate degree for a California resident from an average four-year university.

The MJC Respiratory Care Program begins once a year in the fall semester. If you have questions about the program, contact Allied Health, 575-6362 or visit the Bachelor's Degree Program in Respiratory Care website. For academic advising, contact the Respiratory Care Program Director at 575-6388, the Director of Clinical Education at 575-6381, or the MJC Counseling Office at 575-6080.

PROGRAM ELIGIBILITY REQUIREMENTS

- Admission to Modesto Junior College
- Possession of an associate's degree
- Graduate of a CoARC accredited Respiratory Care Program
- Possession of a Registered Respiratory Therapist (RRT) credential
- Possession of a valid California Respiratory Care Practitioner (RCP) license
- Completion of the 39 required CSU-GE Transfer Pattern units

  (CSU-GE Certification)

Transcripts on File in MJC Enrollment Services: All college transcripts must be submitted to the Admissions and Records office, prior to the program application deadline, unless transcripts are already on file in the MJC Enrollment Services, Student Services Building 102, (209) 575-6853. We will accept hand-carried transcripts that are in a sealed envelope with a school seal.

DEGREE REQUIREMENTS

To receive a Bachelor of Science Degree in Respiratory Care, students are required to complete a minimum of 120 units including 39 lower division CSU-GE transfer units and 40 units of upper division coursework in respiratory care.

A statistics course (MATH 134 or SOCIO 105 or equivalent) is required to meet B.4. Mathematics and Quantitative Reasoning Capstone area of the CSU -GE Transfer Pattern. Program participants are encouraged to take a statistics course before beginning the program.

PROGRAM LOWER DIVISION REQUIREMENTS

Associate Degree in Respiratory Care ..... 43.5 units

COMPLETION OF LOWER DIVISION COURSEWORK THAT LEADS TO A CO-ARC ACCREDITED ASSOCIATE DEGREE IN RESPIRATORY CARE

AREA A: ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING .. 9

AREA B: SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING 9

AREA C: ARTS AND HUMANITIES 9

AREA D: SOCIAL SCIENCES 9

AREA E: LIFELONG UNDERSTANDING AND SELF-DEVELOPMENT 3

GENERAL EDUCATION CSU-GE TOTAL 39

**NOTE: Coursework completed at another educational institution will need to be verified by a CSU-GE certification completed by the College where coursework was completed.*

PROGRAM APPLICATION

Applications are available on the Respiratory Care Bachelor's Degree Program website during the application period only. Applications may be submitted online. If applicants are not currently MJC students, they must apply to the college. Information regarding the Bachelor's Degree Program in Respiratory Care is available on the program's website at http://www.mjc.edu/rcbachelors.

SELECTION PROCESS

One cohort of 40 students will be admitted into the program each fall semester. If there are more qualified applicants than space available, program participants will be chosen by a random selection process.

SCHOLASTIC REQUIREMENTS

Continuation in the Bachelor's Degree Program in Respiratory Care is dependent upon completion of all courses with a C grade or better. If a student receives less than a C in any required course, that course must be repeated with a C or better in order to complete the Bachelor's Degree Program in Respiratory Care.

B.S. DEGREE:
RESPIRATORY CARE

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this program, the student should be prepared to

1. *Perform the duties and functions of an advanced practitioner in neonatal, pediatric, and adult critical care.*
2. *Meet program-defined criteria related to management, advanced clinical practice, teaching, research, professional service and other professional development metrics.*
3. *Participate as a multidisciplinary team member in patient education and disease management of acute and chronic illnesses.*
4. *Integrate professional and ethical behavior with enhanced communication skills required for practice within the diverse field of respiratory care.*
5. *Successfully pass professional credentialing exams including: Adult Critical Care Specialist, Neonatal and Pediatric Specialist, Asthma Educator (NAEB), and the Registered Pulmonary Function Technician national board exams.*

PROGRAM REQUIREMENTS

FALL SEMESTER

SOCIO 400	[1]	Medical Sociology: Health and Diversity	3
RSCR 415	[1]	Disease Management and Healthcare Promotion	3
RSCR 410	[1]	Critical Review of Healthcare Research	3
RSCR 416	[1]	Education and Teaching Strategies for Healthcare Professionals	3

SPRING SEMESTER

COMM 400	[2]	Organization Behavior	3
RSCR 420	[2]	Advanced Pharmacology and Critical Care	3
RSCR 405	[2]	Healthcare Leadership and Operations Management	3
RSCR 425	[2]	Pulmonary Diagnostics, Rehabilitation, and Sleep	3

SUMMER SESSION

PHILO 400	[3]	Medical and Bioethics	3
RSCR 406	[3]	Healthcare Leadership and Operations Management II	3

FALL SEMESTER

RSCR 421	[4]	Advanced Neonatal and Pediatric Critical Care	3
PSYCH 400	[4]	Psychology of Stress, Illness, & Death	3
RSCR 430	[4]	Capstone Research	3

TOTAL UNITS FOR B.S. IN RESPIRATORY CARE MAJOR 40
TOTAL UNITS FOR A.S. IN RESPIRATORY CARE MAJOR 43.5
TOTAL UNITS FOR GENERAL EDUCATION CSU-GE 39

TOTAL DEGREE UNITS 122.5

For more information on the pilot Bachelor's Degree Program in Respiratory Care visit: http://www.mjc.edu/rcbachelors

Retail Management (WAFC) PROGRAM
(209) 575-6129

CERTIFICATE OF ACHIEVEMENT:
RETAIL MANAGEMENT (WAFC)

The Retail Management Certificate Program is designed for individuals who are interested in exploring the Retail field or are currently employed in the retail industry and seek advancement into a managerial position in that field. Course work includes: management, written and oral business communication, financial analysis, marketing, human relations and resource management, leadership, computer applications and retail management.

The Retail Management Certificate is available to all students; however, individuals who are currently employed by a participating WAFC (Western Association of Food Chains) Retailer/Wholesaler are also eligible to receive a WAFC Retail Management Certificate from their employer. These students should contact the HR department of their employer and/or visit www.retailmanagementcertificate.com for further details.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the retail selling environment.*
2. *Obtain employment in a retail management position.*
3. *Apply communication strategies for retail selling environment.*

PROGRAM REQUIREMENTS

Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of "C" or better. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES - COMPLETE 8 (OR 9) COURSES

BUSAD 377	[1]	Human Relations in Business	3
CSCI 201	[1]	General Computer Literacy	3
BUSAD 240	[1]	Principles of Management	3
BUSAD 245	[1]	Principles of Marketing	3
BUSAD 274	[2]	Human Resources Management	3
BUSAD 50	[2]	Business Computations	3 OR
BUSAD 201	[2]	Financial Accounting	4
BUSAD 210	[3]	Business Communication	3 OR
ENGL 101	[2]	Composition and Reading	3 AND
COMM 100	[1]	Fundamentals of Public Speaking	3 OR
COMM 102	[1]	Introduction to Human Communication	3
BUSAD 246	[3]	Retail Management	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 24-28

Sociology
PROGRAM
(209) 575-6129

A.A.-T DEGREE:
SOCIOLOGY

The Associate in Arts in Sociology for Transfer Degree includes lower division coursework that is required for transfer. Sociology is the study of society and how individuals' lives are shaped by the larger social structure. The Associate in Arts in Sociology for transfer Degree will provide foundational training for students in sociological concepts. The program offers a diverse curriculum to provide students with the tools necessary to comprehend their social world, using sociological theory and methodology to focus on social structure and culture. The program includes courses that explore social institutions, social problems, race, ethnic relations and the family. The Associate in Arts in Sociology for Transfer Degree is intended for students who plan to complete a bachelor's degree in Sociology at a California State University campus. Students completing this degree are guaranteed admission to the CSU System, but not to a particular campus or Sociology. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS IN SOCIOLOGY FOR TRANSFER DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements (CSU-GE).

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0.

** All courses required for the major must be completed with a C or better or "P" (Pass).*

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award the student will be able to:

1. *Explain major sociological theories and relevant concepts.*
2. *Critically evaluate and apply theoretical concepts to specific sociological phenomenon.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts in Sociology for Transfer Degree, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway which include completion of the requirements below.

REQUIRED CORE - COMPLETE 10 UNITS

SOCIO 101	[1]	Introduction to Sociology	3
SOCIO 102	[NP]	Social Problems in the United States	3
MATH 134	[NP]	Elementary Statistics	4

LIST A: SELECT TWO (6 UNITS)

SOCIO 125	[NP]	Sociology of the Family	3
SOCIO 150	[NP]	Ethnicity and Culture in America	3
PSYCH 104	[NP]	Introduction to Social Psychology	3

LIST B: SELECT ONE (3 UNITS)

Any course from List A not already used			3
SOCIO 154	[NP]	African-American Cultures and Communities	3
SOCIO 156	[NP]	Mexican Culture in the United States	3
ANTHR 102	[NP]	Cultural Anthropology	3
SOCSC 105	[NP]	Women's Studies	3

TOTAL UNITS IN THE A.A.-T MAJOR..... 19

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED	9-12
GENERAL EDUCATION (CSU-GE OR IGETC) UNITS	37-39
ELECTIVE (CSU TRANSFERABLE UNITS)	11-16

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

Spanish
PROGRAM
(209) 575-6159

A.A.-T DEGREE:
SPANISH

The Associate in Arts in Spanish for Transfer Degree includes lower division coursework that is required for transfer and the Department of Spanish offers various courses that provide students with the foundation for Spanish language study. Knowledge of Spanish is highly desirable in many fields, such as health, service industries, business, and interpreting. Beyond the immediate practical advantages of learning a foreign language, there is also the profound personal enrichment that comes from first-hand knowledge of other cultures. Students majoring in Spanish have the opportunity to become acquainted with the history, literature, and art of the Spanish-speaking world. Students are urged to discuss their plans with faculty and counselors regarding the specific lower-division requirements at the four-year colleges and universities they plan to attend.

The Associate in Arts in Spanish for Transfer Degree is intended for students who plan to complete a bachelor's degree in Spanish at a California State University campus. Students completing the Associate in Arts in Spanish for Transfer Degree are guaranteed admission to the CSU System, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. The Associate in Arts in Spanish for Transfer Degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM LEARNING OUTCOMES

Upon completion of the Associate in Arts in Spanish for Transfer (A.A.-T in Spanish) degree, students will be able to do the following:

1. *Communicate orally in Spanish in real-life situations at an advanced high proficiency level.*
2. *Communicate in writing in Spanish at an advanced high proficiency level with minimal errors in grammar, spelling, and mechanics.*
3. *Read critically and write coherently about literature produced in Spanish.*

THE FOLLOWING IS REQUIRED FOR THE ASSOCIATE IN ARTS FOR SPANISH FOR TRANSFER DEGREE:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:
- *(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.*
- *(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.*

(2) Obtainment of a minimum grade point average of 2.0.

**All courses within the major must be completed with a C or better or "P" (Pass).*

PROGRAM REQUIREMENTS

To earn an Associate in Arts in Spanish for Transfer Degree, the student must complete the requirements detailed in the Associate Degree for Transfer Pathway which include completion of the requirements below.

REQUIRED COURSES - COMPLETE 19-20 UNITS

SPAN 101	[1]	Spanish 1	5
SPAN 102	[2]	Spanish 2	5
SPAN 103	[3]	Spanish 3	4 OR
SPAN 109	[3]	Spanish for Spanish Speakers 1	5
SPAN 110	[4]	Spanish for Spanish Speakers 2	5

LIST A - SELECT ONE

SPAN 112	[4]	Introduction to Chicano/a Literature	3
SPAN 173	[4]	Survey of Latin American Literature	3
ENGL 172	[4]	Intro to Chicano/a Literature	3
ENGL 173	[4]	Intro to Latin American Literature	3
HIST 125	[4]	History of Mexico	3
HIST 145	[4]	History of Latin America	3
SOCIO 156	[4]	Mexican Culture in the United States	3

TOTAL UNITS IN A.A. -T MAJOR..... 22-23

TOTAL UNITS THAT MAY BE DOUBLE-COUNTED..... 6-9
GENERAL EDUCATION (CSU-GE or IGETC) UNITS..... 37-39
ELECTIVE (CSU TRANSFERABLE) UNITS..... 4-11

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

**Note: Double counting courses in GE and the major is permissible. Guidance and Activities requirements are not required for this degree.*

Supervisory Management
PROGRAM
(209) 575-6129

A.S. DEGREE:
SUPERVISORY MANAGEMENT

The Supervisory Management Program is designed to prepare students for leadership responsibilities at the operating level in business, industry, and government. It also provides owners, managers, and other supervisory personnel with the opportunity to complete specific courses designed to develop management ability. Many of the courses are offered in the evening to accommodate working students who are interested in upgrading their skills.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment in an entry-level supervisory position within industry and/ or government sectors.*
3. *Use appropriate and effective business communication skills.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the MJC Associate Degree Requirements in addition to the following coursework. Degrees are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All Required Courses must be passed with a "C" grade or better. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES - COMPLETE 12 UNITS

BUSAD 274	[2]	Human Resources Management	3
BUSAD 351	[1]	Elements of Supervision	3
BUSAD 364	[NP]	Total Quality Management	3
COMM 106	[2]	Group & Organizational Communication	3

ELECTIVE COURSES - COMPLETE 12-13 UNITS

BUSAD 310	[1]	Bookkeeping 1	3 OR
BUSAD 201	[3]	Financial Accounting	4
BUSAD 210	[3]	Business Communication	3 OR
OFADM 304	[2]	Professional English for Business	3
BUSAD 240	[1]	Principles of Management	3
BUSAD 245	[1]	Principles of Marketing	3
BUSAD 248	[1]	Introduction to Business	3
BUSAD 377	[1]	Human Relations in Business	3

TOTAL UNITS IN A.S. MAJOR 24-25

CERTIFICATE OF ACHIEVEMENT:
SUPERVISORY MANAGEMENT

The Supervisory Management Program is designed to prepare students for leadership responsibilities at the operating level in business, industry, and government. It also provides owners, managers, and other supervisory personnel with the opportunity to complete specific courses designed to develop management ability. Many of the courses are offered in the evening to accommodate working students who are interested in upgrading their skills.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Recognize and analyze ethical issues as they apply to the business environment.*
2. *Obtain employment in an entry-level supervisory position within industry and/ or government sectors.*
3. *Use appropriate and effective business communication skills.*

PROGRAM REQUIREMENTS

Certificates are awarded to students in recognition of completion of specified requirements, which indicate proficiency. All Required Courses must be passed with a "C" grade or better. Interested students should consult Business Administration faculty advisors.

REQUIRED COURSES - COMPLETE 12 UNITS

BUSAD 274	[2]	Human Resources Management	3
BUSAD 351	[1]	Elements of Supervision	3
BUSAD 364	[1, 2]	Total Quality Management	3
COMM 106	[1]	Group & Organizational Communication	3

ELECTIVE COURSES - COMPLETE 9-10 UNITS

BUSAD 310	[1]	Bookkeeping 1	3 OR
BUSAD 201	[3]	Financial Accounting	4
BUSAD 210	[3]	Business Communication	3 OR
OFADM 304	[2]	Professional English for Business	3
BUSAD 240	[2]	Principles of Management	3
BUSAD 248	[1]	Introduction to Business	3
BUSAD 245	[2]	Principles of Marketing	3
BUSAD 377	[1]	Human Relations in Business	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD..... 21-22

Theatre
PROGRAM
(209) 575-6081

The Theatre Program at MJC is designed to prepare students to work in professional or semiprofessional theatre situations or to transfer to four-year colleges and universities to pursue additional drama classes that may include preparation for teaching theatre. The program is designed to teach students the techniques of acting, costuming, directing, playwriting, lighting, makeup, oral interpretation, stage design, and children's theatre. The Theatre Program provides students the opportunity to act in major productions.

A.A.-T DEGREE:
THEATRE ARTS

ABOUT THIS DEGREE

The Associate in Arts in Theatre Arts for Transfer Degree (AA-T) prepares students to transfer into the CSU system leading to a baccalaureate degree in Theatre Arts which can lead to careers in teaching, design, technical theatre, theatre management, professional performance, stage direction, stage management, etc. Please consult a counselor regarding specific course requirements for the transfer institution. Completion of the Associate in Arts in Theatre Arts for Transfer Degree also provides guaranteed admission with junior status to the CSU system. Upon completion of the Associate in Arts in Theatre Arts for Transfer students will understand and be able to demonstrate the fundamental performance and technical production processes for the Theatre Arts, demonstrate knowledge of the historical and cultural dimensions of theatre and understand the interaction between script, actor and audience and the areas of scenery, lighting, sound and costume.

The Associate in Arts in Theatre Arts for Transfer Degree is intended for students who plan to complete a bachelor's degree in Theatre Arts at a CSU campus. Students completing this degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students transferring to a CSU campus that does accept this degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree. This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. In all cases, students should consult with a counselor for more information on university admission and transfer requirements.

PROGRAM REQUIREMENTS

The following is required for the Associate in arts in Theatre Arts for Transfer:

(1) Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University, including both of the following:

(A) The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education – Breadth Requirements.

(B) A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.

(2) Obtainment of a minimum grade point average of 2.0. All courses within the major must be completed with a C or better or "P" (Pass).

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Discuss theatre from an historical perspective.*
2. *Demonstrate time management, commitment, follow-through, and responsibility as each attribute is applied to achieving a common group goal.*
3. *Creatively analyze, critique, and interpret works of theatrical art.*
4. *Describe the racial, ethnic and cultural diversity of U.S. and world theatre.*
5. *Express creativity in the artistic process.*

REQUIRED CORE: (9 UNITS)

THETR 100	[NP]	Introduction to Theatre Arts	3
THETR 160	[NP]	Fundamentals of Acting	3
THETR 190	[NP]	Theatre Production Workshop	1 OR
THETR 133	[NP]	Rehearsal and Performance 1	2
THETR 134	[NP]	Rehearsal and Performance 2	2
THETR 135	[NP]	Rehearsal and Performance 3	2
THETR 136	[NP]	Rehearsal and Performance 4	2

** Rehearsal and Performance (Maximum 3 units) or Theatre Production Workshop Maximum 3 units)*

LIST A (SELECT THREE): 9 UNITS:

THETR 105	[NP]	Introduction to Stagecraft	3
THETR 114	[NP]	Script Analysis	3
THETR 161	[NP]	Intermediate Acting	3
THETR 174	[NP]	Stage Makeup	3
THETR 175	[NP]	Stage Costuming	3
THETR 182	[NP]	Practical Stage Lighting	3
THETR 190	[NP]	Theatre Production Workshop	1 OR
THETR 133	[NP]	Rehearsal and Performance 1	2
THETR 134	[NP]	Rehearsal and Performance 2	2
THETR 135	[NP]	Rehearsal and Performance 3	2
THETR 136	[NP]	Rehearsal and Performance 4	2
SELECT FROM REQUIRED CORE COURSES NOT ALREADY USED			3

***Rehearsal and Performance (Maximum 3 units) (if not used in core) or Theatre Production* Workshop (Maximum 3 units) (if not used in core)

TOTAL UNITS REQUIRED IN A.A.-T MAJOR 18

GENERAL EDUCATION (CSU-GE or IGETC) UNITS	37-39
CSU TRANSFERABLE ELECTIVES (AS NEEDED)	8-9
DOUBLE-COUNTED UNITS	3-6

TOTAL UNITS REQUIRED FOR A.A.-T DEGREE 60

** Note: Double counting courses in GE and the major is permissible. MJC Guidance and Activities requirements are not required for the Associate in arts in Theatre Arts for Transfer degree.*

A.A. DEGREE: **THEATRE**

The Theatre Program at MJC is designed to prepare students to work in professional or semi-professional theatre situations or to transfer to four-year colleges and universities to pursue additional drama classes that may include preparation for teaching theatre. The program is designed to teach students the techniques of acting, costuming, directing, playwriting, lighting, makeup, oral interpretation, stage design, and children's theatre. The Theatre Program provides students the opportunity to act in major productions.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Distinguish and describe different practices in World Theater based on history, culture, ethnicity and race.*
2. *Evaluate theater productions by describing the artistic and collaborative processes that were involved in the creation of the production.*
3. *Apply acting and technical skills to create a theatrical piece of art.*

PROGRAM REQUIREMENTS

To earn an Associate in Arts degree in this major, the student must complete the requirements detailed in the Career Technical Education Pathway or the University Preparation Pathway which include completion of the requirements below. Students should consult with a Theatre faculty advisor for selection of elective units. Students who plan to transfer to a four-year college or university should consult with a Theatre faculty advisor to ensure that all required transfer courses are completed.

REQUIRED COURSES - COMPLETE 7 UNITS

THETR 100	[1]	Introduction to Theatre Arts	3
THETR 160	[2]	Fundamentals of Acting	3
THETR 190	[3]	Theatre Production Workshop	1

ELECTIVE COURSES: GENERAL - COMPLETE 10 UNITS

DANCE 102	[NP]	Introduction to World Dance	3
DANCE 155	[NP]	Fundamentals of Choreography 1	2
THETR 105	[NP]	Introduction to Stagecraft	3
THETR 122	[NP]	Introduction to Readers' Theatre	3
THETR 123	[NP]	Storytelling	3
THETR 124	[NP]	Advanced Readers' Theatre	3
THETR 133	[NP]	Rehearsal and Performance 1	2
THETR 134	[NP]	Rehearsal and Performance 2	2
THETR 159	[NP]	Rehearsal and Performance in Musical Theatre	2
THETR 161	[NP]	Intermediate Acting	3
THETR 164	[NP]	Improvisational Acting	3
THETR 174	[NP]	Stage Makeup	3
THETR 175	[NP]	Stage Costuming	3
THETR 182	[NP]	Practical Stage Lighting	3
THETR 196	[NP]	Stage Management	3

ELECTIVE COURSES: MOVEMENT - COMPLETE 2 UNITS

DANCE 111	[NP]	Modern Dance 1	1
DANCE 112	[NP]	Modern Dance 2	1
DANCE 113	[NP]	Modern Dance 3	1
DANCE 121	[NP]	Ballet 1	1
DANCE 122	[NP]	Ballet 2	1
DANCE 123	[NP]	Ballet 3	1
DANCE 124	[NP]	Ballet 4	1
DANCE 131	[NP]	Jazz 1	1
DANCE 132	[NP]	Jazz 2	1
DANCE 133	[NP]	Jazz 3 Intermediate/Advanced	1
DANCE 141	[NP]	Hip Hop	1
DANCE 151	[NP]	Movement for the Performing Artist	3

TOTAL UNITS IN A.A. MAJOR 19

SKILLS RECOGNITION: **DESIGN & TECHNICAL THEATRE**

The Theatre Program at MJC is designed to prepare students to work in professional or semi-professional theatre situations or to transfer to four-year colleges and universities to pursue additional drama classes that may include preparation for teaching theatre. The program is designed to teach students the techniques of acting, costuming, directing, playwriting, lighting, makeup, oral interpretation, stage design, and children's theatre. The Theatre Program provides students the opportunity to act in major productions.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Describe how theatre artists collaborate in order to create a theatrical production.*
2. *Analyze a script in terms of themes, place, time period, style, plot, genre and mood as applied to scenery, costume and lighting planning and design.*
3. *Demonstrate how to safely use common lighting instruments and accessories in the course of lighting a dance concert or play.*
4. *Draw a basic makeup design for a face.*
5. *Demonstrate knowledge of stage and shop safety rules and safe working practices in an applied situation.*
6. *Organize the necessary paperwork and schedule to prepare and run rehearsals and performances.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 16 UNITS

THETR 100	[NP]	Introduction to Theatre Arts	3
THETR 174	[NP]	Stage Makeup	3
THETR 175	[NP]	Stage Costuming	3
THETR 182	[NP]	Practical Stage Lighting	3
THETR 190	[NP]	Theatre Production Workshop	1
THETR 196	[NP]	Stage Management	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 16

SKILLS RECOGNITION:
THEATRE PERFORMANCE

The Theatre Program at MJC is designed to prepare students to work in professional or semi-professional theatre situations or to transfer to four-year colleges and universities to pursue additional drama classes that may include preparation for teaching theatre. The program is designed to teach students the techniques of acting, costuming, directing, playwriting, lighting, makeup, oral interpretation, stage design, and children's theatre. The Theatre Program provides students the opportunity to act in major productions.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Solve memorization and other problems of scene preparation.*
2. *Employ advanced acting techniques for character development, physical and vocal warm ups and performance preparation.*
3. *Analyze a script verbally and/or in writing in terms of theme, character and motivational units.*
4. *Demonstrate the ability to improve a performance after receiving a critique from a director.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES - COMPLETE 6 UNITS

THETR 160	[1]	Fundamentals of Acting	3
THETR 161	[2]	Intermediate Acting	3

ELECTIVE COURSES - COMPLETE 9 UNITS

DANCE 151	[NP]	Movement for the Performing Artist	3
THETR 123	[NP]	Storytelling	3
THETR 133	[1]	Rehearsal and Performance 1	2
THETR 134	[2]	Rehearsal and Performance 2	2
THETR 164	[2]	Improvisational Acting	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD..... 15

Welding
PROGRAM
(209) 575-6332

Student will be able to gas and arc weld in all positions as well as use gas and arc cutting equipment. Upon completion of the A.S. Degree in welding, the student will be employable in the trades or will be able to transfer to a state university for study in an industrial-related degree program.

REQUIRED COMPETENCIES FOR ALL CERTIFICATES AND SKILLS RECOGNITIONS:

All students who plan to earn a certificate must also meet the following competencies.

MATH 19 or 20 [NP]	Pre-algebra (C or better)	4 or 5 OR
	Eligibility for MATH 29 OR MATH 30 by MJC assessment process	

A.S. DEGREE:
WELDING

The Industrial Welding Program supports and maintains a training platform that focuses on the most common welding and sheet metal processes, certifications, and supporting technologies used in industry. The curriculum for the program is concentrated primarily on the Shielded Metal Arc, Gas Tungsten Arc, Gas Metal Arc, Flux Core Arc Welding, Oxy-Acetylene Welding, Oxy-Acetylene and Plasma Cutting. The program's courses expose students to both hands-on, laboratory and lecture learning objectives.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Demonstrate compliance with current welding industry safety and environmental regulations.*
2. *Perform welding operations in accordance with structural, manufacturing, and food processing industries' recognized and accepted practices.*

PROGRAM REQUIREMENTS

To earn an Associate in Science degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework below. All courses for the major must be completed with a "C" or better.

REQUIRED COMPETENCIES

MATH 19 or 20 [NP]		Pre-algebra (C or better)	4 or 5 OR
		Eligibility for MATH 29 OR MATH 30 by MJC assessment process	

REQUIRED COURSES – COMPLETE 31-32 UNITS

AGM 211	[NP]	Advanced Agricultural Welding	3
SM 331	[NP]	Sheet Metal and Installation 1	3
SM 332	[NP]	Sheet Metal and Installation 2	3
WELD 200	[NP]	Arc & Gas Welding	3
WELD 204	[NP]	Gas Metal Arc Welding(G.M.A.W) & Flux Core Arc Welding (F.C.A.W)	3
WELD 206	[NP]	Gas Tungsten Arc Welding (G.T.A.W.)	3
WELD 300	[NP]	Intermediate Welding	3
WELD 325	[NP]	Design and Fabrication Processes	3
WELD 340	[NP]	Pipe Welding	3
MACH 200DE	[NP]	Introduction to Manual Machining	4-5

TOTAL UNITS IN A.S. MAJOR 31-32

CERTIFICATE OF ACHIEVEMENT: **MANUFACTURING TECHNOLOGY (INTERDISCIPLINARY)**

The Industrial Welding Program supports and maintains a training platform that focuses on the most common welding and sheet metal processes, certifications, and supporting technologies used in industry. The curriculum for the program is concentrated primarily on the Shielded Metal Arc, Gas Tungsten Arc, Gas Metal Arc, Flux Core Arc Welding, Oxy-Acetylene Welding, Oxy-Acetylene and Plasma Cutting. The program's courses expose students to both hands-on, laboratory and lecture learning objectives.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Perform the measuring and calculating of voltages, currents, and resistance in circuits and the wiring application of typical industrial equipment.*
2. *Perform typical machining, grinding, and threading operations within acceptable tolerances of general manufacturing procedures.*
3. *Demonstrate proper set-up of SMAW, GMAW, and GTAW equipment and perform typical welding procedures according to general manufacturing codes and standards.*

PROGRAM REQUIREMENTS

To earn a Certificate of Achievement, the student must complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COURSES – COMPLETE 26.5-28.5 UNITS

AGM 262	[1, 2]	Hydraulics/Pneumatics	3
ELTEC 208	[1]	Fundamentals of Electricity and Electronics	3
ELTEC 229	[2, 3]	Commercial & Industrial Wiring	3.5
ELTEC 265	[1, 2]	Troubleshooting Techniques	1
MACH 200DE	[1]	Introduction to Manual Machining	4-5
MACH 201CD	[2]	Manual Machining 2	3-4
WELD 200	[1]	Arc & Gas Welding	3
WELD 204	[2]	Gas Metal Arc Welding(G.M.A.W) & Flux Core Arc Welding (F.C.A.W)	3
WELD 206	[2]	Gas Tungsten Arc Welding (G.T.A.W.)	3

TOTAL UNITS FOR CERTIFICATE OF ACHIEVEMENT AWARD 26.5-28.5

SKILLS RECOGNITION: **DESIGN & FABRICATION**

The Industrial Welding Program supports and maintains a training platform that focuses on the most common welding and sheet metal processes, certifications, and supporting technologies used in industry. The curriculum for the program is concentrated primarily on the Shielded Metal Arc, Gas Tungsten Arc, Gas Metal Arc, Flux Core Arc Welding, Oxy-Acetylene Welding, Oxy-Acetylene and Plasma Cutting. The program's courses expose students to both hands-on, laboratory and lecture learning objectives.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Develop and interpret various types of fabrication prints.*
2. *Develop and interpret weld and welding symbols.*
3. *Use the required welding and sheet metal equipment, perform typical metal fabrication operations.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES FOR SKILLS RECOGNITIONS

MATH 19 or 20 [NP]	Pre-algebra (C or better)	4 or 5 OR Eligibility for MATH 29 OR MATH 30 by MJC assessment process

REQUIRED COURSES – COMPLETE 12 UNITS

WELD 200	[1]	Arc & Gas Welding	3
SM 331	[1]	Sheet Metal and Installation 1	3
WELD 204	[2]	Gas Metal Arc Welding(G.M.A.W) & Flux Core Arc Welding (F.C.A.W)	3
WELD 325	[3]	Design and Fabrication Processes	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 12

SKILLS RECOGNITION: GAS METAL ARC WELDING AND GAS TUNGSTEN ARC WELDING

The Industrial Welding Program supports and maintains a training platform that focuses on the most common welding and sheet metal processes, certifications, and supporting technologies used in industry. The curriculum for the program is concentrated primarily on the Shielded Metal Arc, Gas Tungsten Arc, Gas Metal Arc, Flux Core Arc Welding, Oxy-Acetylene Welding, Oxy-Acetylene and Plasma Cutting. The program's courses expose students to both hands-on, laboratory and lecture learning objectives.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Select GTAW tungsten electrodes and GMAW/FCAW electrode wires required to complete typical welding procedures.*
2. *Make appropriate set up adjustments on GTAW/GMAW equipment required to complete typical welding procedures.*
3. *Fit up and prepare typical weld joint designs according to industry codes and standards.*
4. *Using GTAW/GMAW equipment, perform welding procedures and create welds that meet industry codes and standards.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must meet/ complete the required competencies and complete the following coursework. Each course must be completed with a C or better.

REQUIRED COMPETENCIES FOR SKILLS RECOGNITIONS

MATH 19 or 20	[NP]	Pre-algebra (C or better)	4 or 5 OR
		Eligibility for MATH 29 OR MATH 30 by MJC assessment process	

REQUIRED COURSES - COMPLETE 9 UNITS

WELD 200	[1]	Arc & Gas Welding	3
WELD 204	[2]	Gas Metal Arc Welding(G.M.A.W) & Flux Core Arc Welding (F.C.A.W)	3
WELD 206	[2]	Gas Tungsten Arc Welding (G.T.A.W.)	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 9

SKILLS RECOGNITION: PIPE WELDING

The Industrial Welding Program supports and maintains a training platform that focuses on the most common welding and sheet metal processes, certifications, and supporting technologies used in industry. The curriculum for the program is concentrated primarily on the Shielded Metal Arc, Gas Tungsten Arc, Gas Metal Arc, Flux Core Arc Welding, Oxy-Acetylene Welding, Oxy-Acetylene and Plasma Cutting. The program's courses expose students to both hands-on, laboratory and lecture learning objectives.

PROGRAM LEARNING OUTCOMES

Upon satisfactory completion of this award, the student should be prepared to:

1. *Identify and fit-up various pipe fittings and hangers.*
2. *Identify and select appropriate pipe hangers.*
3. *Calculate and fit up typical joint off-sets.*
4. *Perform typical welding procedures according to industry codes and standards using the SMAW process.*

PROGRAM REQUIREMENTS

To earn a Skills Recognition Award, the student must meet/complete the required competencies, and complete the following coursework. Each course must be completed with a grade of C or better.

REQUIRED COMPETENCIES

All students who plan to earn a skills recognition must also meet the following competencies.

MATH 19 or 20	[NP]	Pre-algebra (C or better)	4 or 5 OR
		Eligibility for MATH 29 OR MATH 30 by MJC assessment process	

REQUIRED COURSES - COMPLETE 9 UNITS

WELD 200	[1]	Arc and Gas Welding	3
WELD 300	[2]	Intermediate Welding	3
WELD 340	[3]	Pipe Welding	3

TOTAL UNITS FOR SKILLS RECOGNITION AWARD 9