

Computer Electronics AS Coursework Roadmap

Instructions:

Be sure to work with a counselor to make sure that your choices will lead to graduation.

1. Take GUIDE 111 or GUIDE 112.
2. Take MATH 101 (maybe with MATH 32) or MATH 89.¹
3. Take ELTEC 300.
4. Take CSCI 201² or any elective numbered 50-299.
5. Take CSCI 270 as your first Computer Programming Area selection.
6. Take ENGL 100 or ENGL 101
7. Take BUSAD 240, ECON 101 or any MJC GE: Area B course.
8. Take PEC 195, ART 102/CMPGR 202, or any MJC Activities Course.
9. Take CMPET 206.
10. Take ELTEC 208 or CSCI 240² as your first Networking Area selection.
11. Take your first Industrial Applications Area selection.

¹ MATH 89 satisfies the MJC GE: D2 requirement. A student who might transfer students should take MATH 101, which satisfies the MJC GE: D2 and CSU GE: B4 requirements. Students are advised to see a counselor on making this choice.

² CSCI 240 has a prerequisite of satisfactory completion of CSCI 201.

Course Selections:	Units	Term
1. GUIDE 110 or GUIDE 111	<u>1</u>	_____
2. MATH 101 (& 32) or Math 89	<u>3-6</u>	_____
3. ELTEC 300	<u>3</u>	_____
4. CSCI 201 or _____ <small>Elective selection</small>	<u>3</u>	_____
5. CSCI 270	<u>3</u>	_____
6. ENGL 100 or ENGL 101	<u>3-5</u>	_____
7. _____ <small>MJC GE: Area B selection</small>	<u>3</u>	_____
8. _____ <small>Activities selection</small>	<u>1-3</u>	_____
9. CMPET 206	<u>3</u>	_____
10. ELTEC 208 or CSCI 240	<u>3 or 4</u>	_____
11. _____ <small>Industrial Application selection</small>	<u>3</u>	_____

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Industrial Application Area - Complete 6 Units

Course #	Course Title
ELTEC 212 ¹	Digital Principles and Circuits (3)
ELTEC 232 ¹	Introduction to Programmable Logic Controllers (3)
ELTEC 234 ¹	Introduction to PACs: Programmable Automation Controllers (3)
MACH 206 ²	CNC Lathe Programming (3)
MACH 207 ²	CNC Mill Programming (3)
MACH 208 ²	Computer Aided Manufacturing (3)

¹ Completion of ELTEC 208 is recommended for success for ELTEC 212, ELTEC 232 and ELTEC 234.

² MACH 206, MACH 207, and MACH 208 recommend a Math level placement. Please see your counselor.

Computer Programming Area - Complete 6 Units

Course #	Course Title
CSCI 270 ¹	Introduction to Programming (3)
CSCI 221	Programming with Visual BASIC (3)
CSCI 271 ²	Problem Solving and Programming 1 (3)
CSCI 273	Assembly Language Programming (3)

¹ CSCI 270 is the prerequisite courses for CSCI 221 and CSCI 271.

² CSCI 271 is the prerequisite courses for CSCI 273.

Networking Area - Complete 6 Units

Course #	Course Title
CSCI 240 ¹	Networking Essentials (4)
ELTEC 208 ²	Fundamentals of Electricity and Electronics (3)
CSCI 210 ³	Introduction to UNIX/Linux Systems and Programming (3)
CSCI 213 ⁴	Windows Server OS (3)

¹ CSCI 240 has a prerequisite of satisfactory completion of CSCI 201.

² Completion of ELTEC 208 is recommended for success for ELTEC 212, ELTEC 232 and ELTEC 234.

³ CSCI 210 has a prerequisite of satisfactory completion of CSCI 270.

⁴ CSCI 213 has a prerequisite of satisfactory completion of CSCI 240.

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Continue to work with a counselor to make sure that your choices work for all of your intended transfer institutions.

12. Take BUSAD 230, HE 110 or any MJC GE Area E course.

13. Take SPAN 51¹, CMPGR 202/ART 102, PHILO 111, or any MJC GE: Area C course.

14. Take CMPET 210.

15. Take CMPET 214.

16. Take CMPET 269.

17. Take PEC 197 or any MJC Activities Course if the course you took in step 9 was two or more units skip this step.

18. Take HE 118 or any elective numbered between 50-299 or if you might one day transfer to a CSU take CSCI 203.

19. Take your second Industrial Applications Area selection.

20. Take your second Computer Programming Area selection.

21. Take your second Networking Area selection.

22. If you have not reached 60 units take an elective numbered between 50-299 or if you might one day transfer to a CSU take COMM 100 or COMM 102.

¹ Spanish 51 meets the MJC GE Area C requirement, but if you might transfer to a CSU take SPAN 101.

Course Selections:	Units	Term
12. _____ MJC GE: Area E selection	<u>3</u>	_____
13. _____ MJC GE: Area C selection	<u>3</u>	_____
14. CMPET 210	<u>3</u>	_____
15. CMPET 214	<u>3</u>	_____
16. CMPET 269	<u>1</u>	_____
17. _____ Activities selection	<u>1</u>	_____
18. _____ Elective or GE selection(s)	_____	_____
19. _____ Industrial Application selection	<u>3</u>	_____
20. _____ Computer Programming selection	<u>3</u>	_____
21. _____ Networking selection	<u>3 or 4</u>	_____
22. _____ Elective or GE selection(s)	_____	_____
Expected Term of Graduation	_____	_____