

Agriculture Mechanics

2019 Program Review

MJC Program Review 2019

Modesto Junior College's Program Review process is divided into 3 sections:

- Program Analysis (SWOT Analysis)
- Goal Setting and Activities
- Resource Request

Program Analysis

Internal Strengths

1. What strengths does the analysis of student data reveal?

Students are easily employable and are sought-after. Significant income potential Program ethnicity is consistent with colleges demographics Program retention rate is consistent with the regional data

2. Are there specific aspects of the program that are exemplary or could serve as a model?

Irrigation Technology is currently the only AS degree offered in California and utilizes facilities that rival those found at universities. Power Equipment Apprenticeship is a model program that is the first in the California Central Valley.

3. What do others see as the program's strengths?

Students are very employable and receive significant compensation. Often double the current living wage.

4. How well are students meeting program learning outcomes, skills, or competencies; and how are they relevant to careers in your discipline or industries for which you help prepare students?

Courses are directly aligned with industry requirements so students prepared to directly enter the workforce Regular advisory committee meeting keep the program relevant.

Internal Weaknesses

5. What gaps are observed by reviewing the student data?

Irrigation technology is still trying to inform students that the program is out there Need to work to improve program completions and degrees

6. What disproportionate gaps need to be addressed?

Female involvement Hispanic completers are below that of their counterparts Add an additional faculty member for the welding program Provide services to aid students in completion

7. What are areas in which the program could improve? (curriculum, scheduling, modality, other?)

Recruitment and student numbers in Irrigation Technology. Increase program completers Expand online or evening course offerings.

8. Where are there gaps in the program on how students are meeting learning outcomes, skills, or competencies?

Program is exploring ways to develop basic math skills for students who enter without proper skills

External Opportunities

9. Where are potential opportunities for expansion, improvement, or new program development?

We are currently working to improve enrollment of the Irrigation Technology Program Expand the course offerings in non-traditional ways. Online, evening, short courses and weekends New programs cannot be added without the addition of dedicated faculty.

10. What are some industry or disciplinary trends that could enhance the program?

Further accusation of technology based equipment. Develop onsite student internships

External Threats

11. How are changing resources, technology, employer, or transfer requirements affecting the program's ability to serve students?

The program has been good at keeping up with technology and equipment acquisition. Sometimes it is difficult to follow the transfer requirements changes at the universities. This is a one on one issue and impacts only a fraction of our students.

12. What are some current industry or disciplinary trends that could have a negative impact on the program?

Whatever the industry trend, the program needs to be aware and work to ensure students are prepared for the workforce or transfer

13. What other obstacles does the program face?

The inability to hire additional faculty.

Goal Setting and Activities

Goals

Program Goal	Mission Alignment	Area of Focus
1. Increase the number of students in the Irrigation Technology Program	Workforce Needs	Curriculum
2. Increase the number of students enrolled in internship and apprenticeship programs.	Workforce Needs	Pedagogy
3. Increase the number of program completers especially those of Hispanic decent	Equity	Student Support

Activities

Activities	In Support of Goal #	Outcome or Deliverable
1. Increase high school recruitment	Goal #1	Improve enrollment by 50%
2. Work with industry representatives to provide industry internships and apprenticeships.	Goal #2	Add 15 internships and/or apprenticeships.
3. Provide counseling and tutoring services for students. Refer students to campus services	Goal #3	Post appropriate calendars and flyers that promote counseling and tutoring services on campus
4. Stay current with industry technology	Goal #3	Purchase new technology to stay current with industry standards

Resource Requests

Category	Request	Activity #	Estimated Cost
Prof. Level.	Send instructors to various professional development opportunities Irrigation Association Training and conferences	4	4000
Prof. Level.	Send instructors to various professional development opportunities Instructor and student travel for competitive events	4	12000

Prof. Devel.	Send instructors to various professional development opportunities Attendance at local, state and national apprenticeship meeting? Attendance at regional and state career expos	4	6000
Equipment	Irrigation Rubicon Canal Gate \$60000 Tier 4 compliant engines Kubota \$40000 Tier 4 compliant engines CAT \$160000 Service truck \$250000 Class sets of small gas engines \$25000	4	535000
Technology	Class set of computers with cart \$40000 Set of shop laptops \$15000 Technology trainers \$80000 Tier 4 engine with Bug Box \$50000 Power train trainer \$50000 Electronics trainers \$10000 Heavy duty fault scanner \$15000 Misc. Hydraulic components \$50000 Misc. Electrical components \$50000	4	360000
Personnel	Additional full time faculty	1	150000
Other	Recruitment materials	1	25000