
Docket Item: 6.7 - CONSENT ITEM: Umpqua Community College | Mechatronics, AAS

Summary:

Umpqua Community College proposes a new Associate of Applied Science in Mechatronics. Higher Education Coordinating Commission (HECC) staff completed a review of the proposed program. After analysis, HECC staff recommends approval of the degree as proposed.

Staff Recommendation:

The HECC recommends the adoption of the following program: Umpqua Community College AAS in Mechatronics.

Recommended Motion:

Move to approve the following degree: Umpqua Community College AAS in Mechatronics.



Umpqua Community College seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to an Associate of Applied Science in Mechatronics.

Program Summary

Mechatronics is a multidisciplinary field that refers to the skill sets needed in the contemporary, advanced automated manufacturing industry. At the intersection of mechanics, electronics, and computing, mechatronics specialists create simpler, smarter systems. Mechatronics is an essential foundation for the expected growth in automation and manufacturing. Mechatronics deals with robotics, control systems, and electro-mechanical systems.

1. ***Describe the need for this program by providing clear evidence.***

UCC officials have had substantial input from local and regional industry leaders regarding the need for Mechatronics technicians.

Mechatronics technicians are in demand in a wide variety of industries, and this need will only grow over time. As the manufacturing, resource extraction, product distribution and material handling sectors modernize, processes that were once physically performed by humans are now performed by machines. Currently, there is an urgent need for well-trained technicians to program, repair and maintain these automated systems. Here in Douglas County specifically, there is a documented need for trained technicians at firms such as RFP, Con-Vey and numerous smaller technologically sophisticated companies.

2. ***Does the community college utilize systemic methods for meaningful and ongoing involvement of the appropriate constituencies?***

UCC has received repeated requests from local and regional industry leaders to create a Mechatronics program.

3. ***Is the community college program aligned with appropriate education, workforce development, and economic development programs?***

The program is designed to graduate employment-ready students with the specific technical skills desired by local and regional industry. The program is centered around the nationally recognized Advanced Manufacturing & Technical Education Curriculum (AMTEC) instructional model.

4. ***Does the community college program lead to student achievement of academic and technical knowledge, skills, and related proficiencies?***

The AMTEC curriculum is of high quality and is widely used by community colleges and technical schools. Graduates of schools using the AMTEC program are highly sought after by industry.

5. ***Does the community college identify and have the resources to develop, implement, and sustain the program?***

Grant funding has provided the equipment needed for program startup. There is substantial support from local and regional industry not only to provide additional equipment and resources, but also to promote the program to their employees and the community. Sustainability will be heavily dependent on a well-organized marketing and outreach campaign. Initial planning for this is underway, but much remains to be done

Assurances

Umpqua Community College has met or will meet the four institutional assurances required for program application.

1. *Access.* The college and program will affirmatively provide access, accommodations, flexibility, and additional/supplemental services for special populations and protected classes of students.
2. *Continuous Improvement.* The college has assessment, evaluation, feedback, and continuous improvement processes or systems in place. For the proposed program, there will be opportunities for input from and concerning the instructor(s), students, employers, and other partners/stakeholders. Program need and labor market information will be periodically re-evaluated and changes will be requested as needed.
3. *Adverse impact and detrimental duplication.* The college will follow all current laws, rules, and procedures and has made good faith efforts to avoid or resolve adverse *intersegmental* and *intrasegmental* impact and detrimental duplication problems with other relevant programs or institutions.
4. *Program records maintenance and congruence.* The college acknowledges that the records concerning the program title, curriculum, CIP code, credit hours, etc. maintained by the Office are the official records and it is the college's responsibility to keep their records aligned with those of the Office. The college will not make changes to the program without informing and/or receiving approval from the Office.