

Docket Item:

Community College Approval: Central Oregon Community College, Associate of Applied Science Degree in Automotive Technology in Electronics and Diagnostics, within 47.0614 – Alternative Fuel Vehicle Technology/Technician.

Summary:

Central Oregon Community College proposes a new Associate of Applied Science Degree in Automotive Technology in Electronics and Diagnostics. 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 resolution:
RESOLVED, that the Higher Education Coordinating Commission approve the following degree: AAS in Automotive Technology in Electronics and Diagnostics.



Central Oregon Community College seeks the Oregon Higher Education Coordinating Commission's approval to offer an instructional program leading to an Associate of Applied Science Degree in Automotive Technology in Electronics and Diagnostics.

Program Summary

The AAS Automotive Technology in Electronics and Diagnostics degree prepares students to enter the emerging field of service and diagnosis of vehicles powered by electricity generated by plug-in electric and hybrid-powertrain sources. Coursework includes technical skills in computer applications, electrical, electronic, mechanical, hydraulic and network systems. Students will learn theory as well as application, using the latest in computer skills and electronic testing equipment to diagnose and repair alternative fueled vehicles.

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

Automotive service technicians is a long-standing occupation. Employment data shows approximately 50 jobs available in Central Oregon on an annual basis with the average wage being \$46,000. There is a paradigm shift in the industry moving from traditional fuel engine vehicles to hybrid and electric vehicles and vehicles with substantially more advanced operating systems (autonomous or partially autonomous vehicles). Included in this paradigm shift will be the move from smaller garages or owners being able to work on the newer vehicles to only being able to service these vehicles in specialized shops. These vehicles and systems will require substantially more investment in specialized equipment and technical knowledge. This degree was developed to address that need.

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

The program was developed through joint ventures and significant systemic working relationships with local and regional business, industry, labor communities, and/or workforce development partners. Specific collaborators include Rio Hondo College, Portland Community College, Peninsula College, Future Tech Auto, AVTGNW membership, and NATEF. Collaborators specific to the COCC Automotive Advisory committee include Deschutes County Public Works, Hunter Engineering, Roberson Ford, Kendal Volkswagen, Lithia Honda, and Carrera Motors.

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

This program was developed based on the forecasted need for adequately trained technicians in the areas of hybrid/electric and autonomous vehicles. Within the Central Oregon Region, the COCC

Automotive Technology Program articulates through the Program of Study (POS) with multiple high school Automotive Technology Programs to include Mountain View HS, Redmond HS and Bend HS. The COCC Automotive Technology Program has a long-standing relationship with the local transportation industries. The Advisory Committee meets twice each year to look at industry trends, curriculum design, and employee needs. The COCC Automotive Technology Program is nationally Accredited through NATEF - National Automotive Technicians Education Foundation. This accreditation requires multiple meetings each year with representatives from industry and education. The COCC Automotive Technology Program is a member of Advanced Vehicle Training Group NW - a regional partnership of education and industry.

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

The curriculum demonstrates a cohesive instructional program that will lead to the attainment of the academic, and career and technical exit proficiencies and clearly documented program and learner outcomes needed for success in the field of study for the occupational area. Students seeking the AAS Automotive Technology in Electronics and Diagnostics complete their degree in five advanced areas. We have found that short-term certificates or Career Pathways help the students to transition from short-term goals to long-term degree goals. For the first 12-15 months, students are eligible for nine Career Pathway Certificates. Using the open lab self-paced learning, provides the students with more instructional time than a traditional classroom during the first phase of the program. Lecture / lab is provided in four-hour segments that includes problem-based learning, development of critical thinking skills along with small team problem solving.

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

The college has demonstrated the capacity to offer the program and has and will provide the necessary and accessible facilities and services to assure that all students can attain the skills and knowledge necessary to fulfill program objectives. The Redmond Technical Center (RTEC) was built to house the second year of the AAS Automotive Technology in Electronics and Diagnostics degree. Instructional support has been in place since the construction of this facility. Financial resources are in place and adequate for the operation of this program.

Assurances

Central 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 *intra-segmental* 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.