



Program Review - Computer Aided Design Drafting AAS

Mission Statement: Prepare the student for employment in a wide range of industries as a CAD operator, printed circuit board designer or technician.

2018 - 2019

Individual Responsible for Completing the Plan: Steve Billingslea

Mission/Purpose

How does the mission/purpose clearly identify why the program exists and how it prepares students?: Mission/Purpose: Students completing the AAS in Computer Aided Design and Drafting (CADD) program prepares the student for employment in a wide range of industries as a CAD draftsman. Information in related fields is provided to enable the student to work effectively with engineers, technologists, architects and professional staff and also prepares students to further their education in 4 year college.

What is the scope of the program or department?: Students completing the CADD AAS degree will be prepared for employment in a wide range of industries as a CAD draftsman Architecture, Civil, and Engineering, .

Target Population

What populations should be targeted to increase the student count and diversity of the program?: The target population for this program is multifaceted, as it serves traditional and non-traditional students. The traditional college student has graduated from high school and is seeking a two-year terminal degree to enter the workforce or transfer to a four-year university. The non-traditional student represents current high school students or working adults returning to start or finish a program of study. Our surrounding area is comprised of urban, suburban, and industrial communities that include the southwest quadrant of the city of Dallas, and the cities of Cedar Hill, Duncanville, and Grand Prairie.

Program Enrollment

Is the program consistently attracting new students? If so, why? If not, why not?: Yes, because we continue to use up-to-date equipment and software in CADD classes.

What does course enrollment by semester tell you?: Enrollment is steady, as we compare Fall to Fall and Spring to Spring enrollment figures

Program Outcomes

Describe the extent to which program level SLOs are appropriate and designed for the program?: Program outcome data was reviewed and aggregated for Computer Aided Design Drafting. The overall departmental goal, across programs, is an achievement rate of at least 70%. Although some program outcomes exceed the 70% goal, there is room for improvement. It will take time to build capacity to fully analyze this data. The Computer Aided Design Drafting Department intends to collaborate and discuss the meaning of the results and to design an action plan to improve student achievement, especially among the lower performing groups.

What does the trend data tell you about the outcomes? What are the implications?: Students are achieving learning outcomes at an acceptable rate. This means that the instruction is excellent.

Analyze effectiveness of current program assessment processes: Although faculty are pleased with SLO results, faculty believe there is always room for improvement. In particular, some SLO assessment rates fell below the departmental goal of 70%.

Faculty intend to review curriculum and prioritize courses with the lower success rates. In particular, faculty will evaluate, and refine if necessary, the Student Learning Outcomes, review assessment tools, and collaborate with part-time faculty to outline deliberate ways to increase student learning.

The Computer Aided Design Drafting curriculum provides a diverse spectrum of courses and programs to serve our community. The faculty believe that creating a strategic plan to address student learning in consistent and logical manner will produce measurable results. The Computer Aided Design Drafting Department is not satisfied with the consistency of the assessment process, and believe that improvement is an opportunity that should not be neglected. For instance, we believe that the growth of the Dual Credit program has stretched this department to consistently measure SLO activity, and the department must do a better job of working with our instructional peers that are serving the high school students enrolled in college courses. We believe that our established foundation of assessment has been effective, but there are new opportunities that must be addressed in our planned collaborative efforts to increase student learning, retention and success rates.

Curriculum

To what extent is the curriculum aligned with K-12? If not aligned, identify gaps.: The program learning objectives align with current with current State Board of Education TEKS, as guided pathways have been established for the program.

To what extent is the curriculum aligned with transfer institutions? If not aligned, identify gaps.: A program course audit was conducted of for all courses to ensure that learning objectives aligned with established guided pathways.

Program Structure

What internships, practicums, and service learning opportunities are included with this program?: Two co-op courses available for students to take to complete degree requirements.

List all articulation agreements with four year institutions. If none exist, please explain.: No, this is a technical program that is focused on preparing students to enter the industry after completing the two-year terminal degree. WECM course do not transfer to 4-year universities.

Are resources sufficient to meet identified needs and goals for the next three years? Explain.: Yes, more attention must be given to the Dual Credit classroom resources to ensure that the necessary technology is available at the high schools.

Program Evaluation Needs

Please explain how online offerings are sufficient to meet the program's needs for student success.: The program may be completed entirely on-line. All courses utilize eCampus for the LMS which contain institutional resources, complete course content, and lecture and demo videos.

How have changes in service delivery required changes in staff skills?: The current faculty are well trained on delivery of distance education.

How are staff being trained, retained, and developed?: The program chair offers one-on-one training every semester to all program faculty members.

What staff development opportunities have been utilized in the past five years?: Faculty training opportunities have been offered at MVC and through the DCCCD over the past five years.

When were faculty teaching courses through distance education last trained?: January 2019

Is staffing adequate for your program?: Yes, the program has adequate faculty with a combination of full-time and adjunct faculty

How are the skills of your current staff members meeting the needs of your area?: The skills of the current staff members meet the needs of the service area.

What additional training is needed?: Additional online training on the utilization of Blackboard (eCampus) and eConnect would be welcomed.

Are facilities adequate to facilitate teaching and learning? Explain why or why not.: Yes, the program only requires classroom with CADD technology.

What innovative ideas/suggestions do you have to improve student success with your program?: The program only requires classroom with CADD technology at the college. More attention must be given to the program at ECHS and dual credit sections offered at remote locations at the high schools.

Based on assessments and needs, define your program's plan for the next three years.: The CADD software updates annually. Over the next three years, the program will undergo consistent evaluation to ensure that materials and curriculum are maintained to meet or exceed academic standards and industry needs.

Conclusions and Recommendations

Detail the program's strengths, and the opportunities for continued success and improvement.: The strength of the program is in its ability to offer the curriculum in a traditional and non-traditional format. The program may be completed by both distance learning and lecture modalities or a combination of both.

Detail the program's weaknesses and threats (internal or external) that impact effectiveness: A possible weakness may exist in maintaining up-to-date equipment that will keep up with the software that updates annually and the ability to seek out new technologies or new learning materials to assist with the delivery of the curriculum. Also, more resources will be necessary to manage the growth of dual credit and Early College High School commitments.

Detail recommendations to enhance effectiveness and improve student learning: Recommend the utilization of support staff to assist with the identification of new technologies and/or new learning materials to assist with the delivery of the curriculum.

Provide an action plan to enhance the program's effectiveness.: The Executive Dean and the program faculty members meet to discuss opportunities in Fall 2019.