



NEW PROGRAM PROPOSAL FORM

Sponsoring Institution(s): Crowder College

Program Title: Computer Aided Drafting

Degree/Certificate: Certificate (C1 - >=1 year but < 2 yr)

Options: NA

Delivery Site(s): Crowder College in Neosho, and online

CIP Classification: 15.1303

\*CIP code can be cross-referenced with programs offered in your region on MDHE's program inventory highered.mo.gov/ProgramInventory/search.jsp

Implementation Date: Fall 2016

Cooperative Partners: NA

\*If this is a collaborative program, form CL must be included with this proposal

AUTHORIZATION:

Dr. Glenn Coltharp, VP for Academic Affairs

*Glenn Coltharp*

1-29-16

Name/Title of Institutional Officer

Signature

Date

Dr. Adam Morris

417-455-5740

Person to Contact for More Information

Telephone



## STUDENT ENROLLMENT PROJECTIONS

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Year	1	2	3	4	5
Full Time	3	5	7	10	12
Part Time	1	3	4	6	8
Total	4	8	11	16	20

Please provide a rationale regarding how student enrollment projections were calculated:

The current enrollment in the CAD courses is a total of 9 students. These students are a combination of Pre-engineering, and Drafting majors. The prediction of growth is from expected advertisement and support from the local Advisor Committee. The prediction are for the Labor force growth to slow down. Due to these prediction the small growth of the class roster is an attempt to mirror the Department of Labor Predictions. According to the American Design Drafting Association (ADDA) (2015) "CAD is important to a number of academic and professional fields." Students are searching for that specialized training that can assist them in obtaining employment quicker today.

Provide a **rationale** for proposing this program, including **evidence of market demand and societal need supported by research**:

The growth of CAD related specialties predicted to have a slow but steady growth in the U.S. according to the department of Labor. The number of job opportunities for Drafters, engineering technicians, mapping technicians, architectural drafters, civil drafters, Electrical and electronics drafters and Mechanical drafters is projected to increase by over 195,000 positions. (Table 1.2 Employment by detailed occupation, 2014 and projected 2024). The employment opportunities listed by the department of Labor require the CAD certificate. Jobstocareers.com list over 290 CAD jobs in Missouri alone..

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## PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

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Institution Name      Crowder College  
Program Name        Computer Aided Drafting (CAD) Certificate  
Date    21 January 21, 2016

(Although all of the following guidelines may not be applicable to the proposed program, please carefully consider the elements in each area and respond as completely as possible in the format below. Quantification of performance goals should be included wherever possible.)

### 1. Student Preparation

- Any special admissions procedures or student qualifications required for this program which exceed regular university admissions, standards, e.g., ACT score, completion of core curriculum, portfolio, personal interview, etc. Please note if no special preparation will be required.  
None
- Characteristics of a specific population to be served, if applicable.  
Not Applicable

### 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.  
Associate of Applied Science in Drafting & Design
- Estimated percentage of credit hours that will be assigned to full time faculty. Please use the term "full time faculty" (and not FTE) in your descriptions here.  
Full time faculty teach 30 credit hours in one year (2 Semesters). The certificate is composed of 17 hours of Drafting Credits, therefore the estimated percentage of credit hours assigned to full time faculty is approximately 56%. The certificate credits will also be required for the AAS in Drafting & Design.
- Expectations for professional activities, special student contact, teaching/learning innovation.  
Guest Speakers are arranged each semester from industry. Once in the certificate phase a field trip will be fulfilled to applicable industry. Local Industry partners submit drawings for students to study and make real life changes to drawings.

### 3. Enrollment Projections

- Student FTE majoring in program by the end of five years.

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- Percent of full time and part time enrollment by the end of five years.  
60% full time enrollment and 40% part time enrollment is the prediction for the five year outlook.

#### 4. Student and Program Outcomes

- Number of graduates per annum at three and five years after implementation.  
Three year prediction is 11 Graduates, and the five year prediction is 20.
- Special skills specific to the program.  
Demonstrate visualization skills and prepare orthographic drawings, geometric construction principles, create 2-D drawings using the draw, modify, view, and display commands, proper drawing setup including layers, scaling, line-type scale and plot to proper scale. Extract surface and mass properties and Import/Export various file formats. Utilize listening and teamwork skills, oral and written communication skills especially proper spelling and grammar, math principles using formulas, algebra, geometry and trigonometry.
- Proportion of students who will achieve licensing, certification, or registration.  
N/A
- Performance on national and/or local assessments, e.g., percent of students scoring above the 50th percentile on normed tests; percent of students achieving minimal cut-scores on criterion-referenced tests. Include expected results on assessments of general education and on exit assessments in a particular discipline as well as the name of any nationally recognized assessments used.  
It is anticipated that students will pass above the 80th percentile on the ETS proficiency exam
- Placement rates in related fields, in other fields, unemployed.  
The expected opportunity for placement of graduates from CAD program into the work specific or closely related field is 95%.
- Transfer rates, continuous study.  
Crowder College awards the AAS degree as a workforce preparation degree. Students seeking to transfer to a baccalaureate degree program in AMT - Welding or a related field may wish to pursue additional coursework as electives. The college will pursue articulation agreements with institutions who award such a degree and maintain this information for students.

#### 5. Program Accreditation

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- Institutional plans for accreditation, if applicable, including accrediting agency and timeline. **If there are no plans to seek specialized accreditation, please provide a rationale.**

Crowder College plans to seek program accreditation with the appropriate agencies.

#### 6. Alumni and Employer Survey

- Expected satisfaction rates for alumni, *including timing and method of surveys*. Through the office of Career Services, Crowder College uses the Perkins 180-day follow-up survey/questionnaire that is sent to all career and technical program graduates.
- Expected satisfaction rates for employers, including timing and method of surveys. Through the office of Career Services, Crowder College conducts its own employer satisfaction survey 300 days after students graduate. We anticipate an 80% or higher satisfaction rate.

#### 7. Institutional Characteristics

- Characteristics demonstrating why your institution is particularly well-equipped to support the program.

Crowder College currently has the AAS in Drafting and Design with a Certified Teacher. The CAD courses are currently on the curriculum and schedule for the AAS. Crowder College has the software and specialized equipment to implement the certificate curriculum. Crowder College is accredited by the Missouri Department of Elementary and Secondary Education and the Coordinating Board for Higher Education. The college is also fully accredited by the Higher Learning Commission a member of the North Central Association. Crowder College provides opportunities for people to pursue associate degrees, certificate and diploma programs, plus continuing education to include: a program of Arts and Sciences directed toward transfer to baccalaureate degree granting institutions and to general intellectual enrichment, career education leading to economic self reliance both developmental and honors education to allow greater opportunity to fully exercise each individual's academic potential, endeavors to enrich life through cultural and a vocational opportunity, and partnerships with business, industry and others designed to support a great quality of life and an economic base in the community.

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E. Free elective credits:

None

(Sum of C, D, and E should equal A.)

F. Requirements for thesis, internship or other capstone experience:

Students will be required to participate in internships.

G. Any unique features such as interdepartmental cooperation:

None

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Form PS – Program Structure