



**NEW PROGRAM PROPOSAL FORM**

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**Sponsoring Institution(s):** Crowder College

**Program Title:** Diesel Technology: Basic Electrical/Electronics II

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

**Options:** NA

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

**CIP Classification:** 47.0605

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

**Implementation Date:** Fall 2017

**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

Name/Title of Institutional Officer	Signature	Date
Dr. Adam Morris	417-455-5740	
Person to Contact for More Information	Telephone	

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## PROGRAM CHARACTERISTICS AND PERFORMANCE GOALS

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Institution Name      Crowder College  
Program Name         Diesel Technology Electrical/Electronics II Certificate  
Date    11/16/2016

(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.  
No special preparation will be required
- Characteristics of a specific population to be served, if applicable.  
No specific population

### 2. Faculty Characteristics

- Any special requirements (degree status, training, etc.) for assignment of teaching for this degree/certificate.  
Specialized training, experience and ASE certification are required.
- 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 16 hours of Diesel Technology Credits, therefore the estimated percentage of credit hours assigned to full time faculty is approximately 53.3%. The certificate credits will also be required for the AAS in Diesel technology.
- 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 and staff provide real life automechanic problems.

### 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.  
70% full time enrollment and 30% 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 12 Graduates, and the five year prediction is 22.
- Special skills specific to the program.  
Specific skills will include various Electrical and Electronic systems in trucks and equipment associated with heavy equipment certifications. The student will also learn electrical/electronic testing equipment and procedures. This course will also provide the student with a technical understanding of calculating material and use of proper procedures for the completion of Electrical/Electronic troubleshooting.
- Proportion of students who will achieve licensing, certification, or registration.  
Prediction of proportion of graduates with the Basic Electrical/Electronics I certificate achieving licensing, certification or registration is 75%.
- 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.  
Placement rates in the local area are predicted to be 95%. Placement in other fields are predicted to be 2%, and the unemployed rate is expected to be 3%.
- Transfer rates, continuous study.  
Since this is a terminal educational opportunity the transfer rate is expected to be very low, approximately less than 5%.

#### 5. Program Accreditation

- 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 has the ultimate goal in any program to train students to function in society as a responsible citizen. Crowder College programs objectives are to build strong ties and relationships between the college and other educational institutions, both secondary and post-secondary, the community, and the businesses and organizations that support our community. Crowder College already has in place an Associate of Applied Science in Auto Technology, and Auto Technology – Parts Management. 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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**STUDENT ENROLLMENT PROJECTIONS**

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Year	1	2	3	4	5
Full Time	3	5	7	10	18
Part Time	1	3	4	6	18
Total	4	8	11	16	36

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

Based on feedback from our industry partners, and students the Diesel Technology: Electricity/Electronics II certificate is a career that is needed in our service area.

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

Student interest has peaked in the last few years in the Diesel Technology Field (DIES). With this increase interest the diesel program has felt the influence of students requiring both a Diesel certificate and the Associate of Applied Science education and skills for today's employment market. This highly trained individual is in great demand not only in this district but throughout the Nation. The jobs.mo.gov search for Diesel Mechanic displayed 894 employment opportunities in the state of Missouri. According to the Missouri Connections link to The U.S. Occupational Handbook, the Job outlook states that the employment of diesel service technicians and mechanics is projected to grow 12% from 2014 to 2024, faster than the average for all occupations. Job opportunities should be best for those who have completed postsecondary training in diesel engine repair.

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The mission of Crowder College is to build a civil, serving, literate, learning community of responsible citizens. We view the college as having an activate role in economic and social development through continuing education and customized training, directed toward improving work skills and productivity, creating a more desirable work and social environment, and adding to the general quality of life within the region. This new program will add skilled workers to this career field, and meet a growing need in the community.

**Program Duplication:**

There are no accredited associate degrees similar to this one offered in our service region by any other community colleges. There is no duplication of effort by other community colleges.

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PROGRAM STRUCTURE

A. Total credits required for graduation: 28

B. Residency requirements, if any: None

C. General education: Total credits: 0

Courses (specific courses OR distribution area and credits):

Course Number	Credits	Course Title

D. Major requirements: Total credits: 28

Course Number	Credits	Course Title
DIES 134	4	Diesel Hydraulics
DIES 164	4	Diesel Brake Systems
DIES 184	4	Electrical/Electronics I
DIES 204	4	Diesel Powertrains
DIES 234	4	Air Conditioning
DIES 244	4	Diesel Internship
DIES 284	4	Diesel Electrical/Electronics II

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E. Free elective credits:

0

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

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

Four credit hour internship required for completion of certificate.

G. Any unique features such as interdepartmental cooperation:

None