

# DIESEL/HEAVY EQUIPMENT

College of Rural and Community Development  
Community and Technical College  
907-455-2809  
[www.ctc.uaf.edu/programs/diesel/](http://www.ctc.uaf.edu/programs/diesel/)

## Certificate

Minimum Requirements for Certificate: 36 credits

The diesel and heavy equipment mechanics program offers the student training in the maintenance and repair of trucks, buses and heavy equipment. This one-year certificate program emphasizes hands-on training and in-class experience as students perform preventive maintenance inspections, determine causes of equipment problems and make necessary repairs and adjustments from tune-ups to complete engine and equipment overhauls. Students work on large truck fuel, electrical and air systems, diesel engines, transmissions, differentials, crawler tractor undercarriages, steering and final drives. A student may request credit by examination for any DSLT or MECN class. See department coordinator for details.

## Certificate Program

1. Complete the general university requirements (page 95).
2. Complete the certificate requirements. (See page 97. As part of the certificate requirements, the communication, human relations, and computation content is embedded in the major required courses for this program.)
3. Complete the following program (major) requirements:

DSLTL F101—Safety Including Rigging and Lifting .....	1
DSLTL F103—Basic Equipment and Truck Operation .....	1
DSLTL F105—Preventive Maintenance .....	3
DSLTL F107—Basic Electrical Systems and Electrical Fuel Injection	
3	
DSLTL F123—Heavy Duty Braking Systems .....	3
DSLTL F154—Diesel Fuel Injection .....	3
DSLTL F201—Manual Transmissions and Differentials.....	3
DSLTL F202—Heavy Duty Automatic Transmissions .....	2
DSLTL F254—Engine.....	5
MECN F103—Starting and Charging Systems.....	3
MECN F210—Hydraulics .....	3
WMT F103—Welding I.....	3
WMT F105—Welding II.....	3
4. Minimum credits required .....

All degrees (e.g. Certificate, A.A., A.A.S., A.S., etc) require additional courses. Refer to specific degree and program requirements.

## Certificate Requirements

### COMMUNICATION (2-3)

Complete one of the following:

ENGL F111X.....	(3)	_____
ABUS F170 .....	(3)	_____
ABUS F271 .....	(3)	_____
ENGL F211X.....	(3)	_____
ENGL F212 .....	(3)	_____
ENGL F213X.....	(3)	_____
COMM F131X.....	(3)	_____
COMM F141X.....	(3)	_____
DEVS F104.....	(1 – 3)	_____
DEVS F105 .....	(3)	_____

*Other program-approved discipline-based communication course or discipline-based courses with embedded communication content. (2 – 3)*

\* ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

### COMPUTATION (2-3)

Complete one of the following:

Any course at the F100-level or above in mathematical sciences (computer science, math or statistics).....	(3)	_____
ABUS F155 .....	(3)	_____
DEVM F105.....	(3)	_____
ECE F117 .....	(3)	_____
HLTH F116 .....	(3)	_____
HUMS F117.....	(3)	_____
PRT F155.....	(3)	_____
TTCH F131 .....	(3)	_____

*Other program-approved discipline-based computation course or discipline-based courses with embedded computation content. (2 – 3)*

### HUMAN RELATIONS (2-3)

Complete one of the following:

ANTH F100X/SOC F100X.....	(3)	_____
ABUS F154 .....	(3)	_____
ANL F287.....	(3)	_____
ECE F245 .....	(3)	_____
ED/PSY F245.....	(3)	_____
HLTH F106 .....	(3)	_____
HUMS F120.....	(3)	_____
RHS F110 .....	(1)	_____
AND RHS F115 .....	(2)	_____

*Other program-approved discipline-based human relations course or discipline-based courses with embedded human relations content. (2 – 3)*

**MAJOR SPECIALTY CREDITS (minimum)..... 21**

**Minimum credits for required certificate..... 30**

## Associate of Applied Science Requirements

### COMMUNICATION (9)

ENGL F111X.....	(3)	_____
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Complete one of the following:

ABUS F271 .....	(3)	_____
ENGL F211X.....	(3)	_____
ENGL F212 .....	(3)	_____
ENGL F213X.....	(3)	_____

\* ENGL F212 does not fulfill the second half of the written communication requirement for the bachelor's degree.

Complete one of the following:

COMM F131X.....	(3)	_____
COMM F141X.....	(3)	_____

### COMPUTATION (3)

Complete one of the following:

Any course at the F100-level or above in mathematical sciences (computer science, math or statistics).....	(3)	_____
ABUS F155 .....	(3)	_____
DEVM F105.....	(3)	_____
ECE F117 .....	(3)	_____
HLTH F116 .....	(3)	_____
HUMS F117.....	(3)	_____
PRT F155.....	(3)	_____
TTCH F131 .....	(3)	_____

*Other program-approved discipline-based computation course or discipline-based courses with embedded computation content. (3)*

### HUMAN RELATIONS (2-3)

Complete one of the following:

ANTH F100X/SOC F100X.....	(3)	_____
ABUS F154 .....	(3)	_____
ANL F287.....	(3)	_____
ECE F245 .....	(3)	_____
ED/PSY F245.....	(3)	_____
HLTH F106 .....	(3)	_____
HUMS F120.....	(3)	_____
RHS F110 .....	(1)	_____
AND RHS F115 .....	(2)	_____

*Other program-approved discipline-based human relations course or discipline-based courses with embedded human relations content. (3)*

**MAJOR SPECIALTY CREDITS (minimum)..... 30**

**Minimum credits required for degree ..... 60**



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