

# POWER GENERATION

College of Rural and Community Development  
Community and Technical College  
907-455-2906  
[www.ctc.uaf.edu/programs/pgen/](http://www.ctc.uaf.edu/programs/pgen/)

## Certificate

Minimum Requirements for Certificate: 37 credits

The power generation program will help students develop entry-level skills needed in industrial and commercial electrical power generation and maintenance. Courses combine the technical know-how and hands-on experience necessary to develop entry level workers in a variety of power generation and industrial fields. Students will become familiar with the operation and maintenance of the standard equipment encountered in the power generation industry.

## Certificate Program

1. Complete the general university requirements (page 93).
  2. Complete the certificate requirements (page 95).
  3. Complete the following program (major) requirements:\*
    - PGEN F101—Intro to Power Generation, Distribution and Alternative Energy .....3
    - PGEN F102—Basic Electricity for Power Generation Operators .....4
    - PGEN F103—Introduction to Power Generation: Maintenance.....4
    - PGEN F104—Gas and Steam Turbines; Co-Generation and Combined Cycle Technologies .....4
    - PRT F110—Introduction to Occupational Safety, Health and Environmental Awareness.....3
    - PRT F120—Water Quality Management for Process Industries .....4
    - PRT F140—Industrial Process Instrumentation I .....3
    - WMT F103—Welding I .....3
  4. Minimum credits required .....37
- \* Students must earn a C grade (2.0) or better in each course.

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**



**UNIVERSITY OF ALASKA FAIRBANKS**

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