

POWER GENERATION

College of Rural and Community Development
Community and Technical College
907-479-2436
www.ctc.uaf.edu/programs/pgen/

Certificate

Minimum Requirements for Certificate: 37 credits

The power generation program will help students develop entry-level skills 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 94).
 2. Complete the certificate requirements (page 96).
 3. Complete the following program (major) requirements:^{*}
 - PGEN F101—Introduction 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 Awareness3
 - PRT F120—Water Quality Management for Process Industries.....4
 - PRT F140—Industrial Process Instrumentation I.....3
 - WMT F103—Welding I3
 4. Minimum credits required37
- ^{*} Students must earn a C grade or better in each course.



Certificate Requirements

Communication 2–3 Credits

Complete one of the following:

- ENGL F111X—Introduction to Academic Writing.....(3)
- ABUS F170—Business English.....(3)
- ABUS F271—Business Communications(3)
- ENGL F211X—Academic Writing about Literature.....(3)
- ENGL F212—Business, Grant and Report Writing*(3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences(3)
- COMM F131X—Fundamentals of Oral Communication: Group Context(3)
- COMM F141X—Fundamentals of Oral Communication: Public Context.....(3)
- DEVS F104—University Communications..... (1–3)
- DEVS F105—Intensive Reading Development(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 Credits

Complete one of the following:

- Any course at the F100 level or above in mathematical sciences (computer science, math or statistics)(3)
- ABUS F155—Business Math.....(3)
- DEVM F105—Intermediate Algebra(3)
- ECE F117—Math Skills for Early Childhood Educators.....(3)
- HLTH F116—Mathematics in Health Care.....(3)
- HUMS F117—Math Skills for Human Services.....(3)
- TTCH F131—Mathematics for the Trades(3)
- Other program-approved discipline-based computation course or discipline-based courses with embedded computation content.(2–3)

Human Relations 2–3 Credits

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (s).....(3)
- ABUS F154—Human Relations(3)
- ANL F287—Teaching Methods for Alaska Native Languages (h).....(3)
- ECE F104—Child Development: Prenatal, Infants and Toddlers (s)(3)
- ECE F107—Child Development II: Preschool and Primary Years (s)(3)
- ED/PSY F245—Child Development (s)(3)
- HLTH F106—Human Behavior in Health Care (s).....(3)
- HUMS F120—Cultural Diversity in Human Services.....(3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND
RHS F115—Issues of Personal Development(2)
- Other program-approved discipline-based human relations or discipline-based courses with embedded human relations content(2–3)

Major specialty at least 21 Credits

Electives to total 30 Credits

Associate of Applied Science Requirements

Written Communication 6 Credits

- ENGL F111X—Introduction to Academic Writing.....(3)

Complete one of the following:

- ABUS F271—Business Communications(3)
- ENGL F211X—Academic Writing about Literature.....(3)
- ENGL F212—Business, Grant and Report Writing*(3)
- ENGL F213X—Academic Writing about the Social and Natural Sciences(3)

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

Oral Communication 3 Credits

Complete one of the following:

- COMM F131X—Fundamentals of Oral Communication: Group Context(3)
 - COMM F141X—Fundamentals of Oral Communication: Public Context.....(3)
- or successful completion of competency test

Computation 3 Credits

Complete one of the following:

- Any course at the F100 level or above in mathematical sciences (computer science, math or statistics).(3)
- ABUS F155—Business Math.....(3)
- DEVM F105—Intermediate Algebra(3)
- ECE F117—Math Skills for Early Childhood Educators.....(3)
- HLTH F116—Mathematics in Health Care(3)
- HUMS F117—Math Skills for Human Services(3)
- TTCH F131—Mathematics for the Trades(3)
- Other program-approved discipline-based computation course or discipline-based courses with embedded computation content.(3)

Human Relations 3 Credits

Complete one of the following:

- ANTH F100X/SOC F100X—Individual, Society and Culture (s).....(3)
- ABUS F154—Human Relations(3)
- ANL F287—Teaching Methods for Alaska Native Languages (h).....(3)
- ECE F104—Child Development: Prenatal, Infants and Toddlers (s)(3)
- ECE F107—Child Development II: Preschool and Primary Years (s)(3)
- ED/PSY F245—Childhood Development (s)(3)
- HLTH F106—Human Behavior in Health Care (s)(3)
- HUMS F120—Cultural Diversity in Human Services.....(3)
- RHS F110—Cross-Cultural Bridging Skills (1) AND
RHS F115—Issues of Personal Development(2)
- Other program-approved discipline-based human relations course or discipline-based courses with embedded human relations content(3)

Major specialty at least 30 Credits

Electives to total 60 Credits

Minimum credits required for degree 60 Credits

