

# ENGINEERING

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## Ph.D. Degree

Engineers use knowledge of the mathematical and natural sciences to develop economical uses of materials and forces of nature for human benefit. The professional practice of engineering requires sophisticated skills, use of judgment and exercise of discretion. The basic education necessary for the professional practice of engineering is provided by the engineering bachelor's and master's degrees. Doctoral-level education requires independent research that generates fundamental advances in technology and discovers new knowledge for the benefit of society. Engineering Ph.D. degrees provide leadership in scientific research, academia and industrial research and development. The Ph.D. degree in engineering draws on the combined strength of the College of Engineering and Mines and offers opportunities for engineers at other UA campuses to participate.

Minimum Requirements for Engineering Doctorate Degree: 36 credits

College of Engineering and Mines (<https://cem.uaf.edu/academics/programs/>)  
907-474-7241

## Programs Degree

- Ph.D., Engineering (<http://catalog.uaf.edu/graduate/graduate-degree-programs/engineering/phd/>)

(<http://catalog.uaf.edu/graduate/graduate-degree-programs/engineering/phd/>)With concentrations in:

- Arctic
- Civil
- Computer
- Electrical
- Engineering Management
- Environmental
- Geological
- Mechanical
- Mining
- Petroleum