ENGINEERING & APPLIED SCIENCE

The College of Engineering and Applied Science has a tradition of excellence in engineering education dating back to 1893, and we continually update and improve our programs to reflect the highest standards in teaching and learning, discovery and innovation, and community and culture. We are the top-ranked engineering school in the Rocky Mountain region, with 14 baccalaureate programs and 12 graduate programs offering more than 35 degrees.

Mission & Vision

The mission of the College of Engineering and Applied Science (http://www.colorado.edu/engineering) is to generate new knowledge in engineering and related fields and to equip students from diverse backgrounds as future leaders and responsible citizens in these fields for the betterment of individuals and society. Its vision is to be a world leader in engineering research and education, with an emphasis on integrated and discovery learning and on engineering for global society.

The college embraces the following core values:

- **Global Society**: Our innovative research programs seek to create and disseminate knowledge to improve global society in areas such as health and well-being, energy and environmental sustainability and infrastructure for both developed and developing communities. Similarly, our innovative educational programs seek to prepare graduates with not only technical knowledge and excellence, but also skills for societal leadership and global citizenship.

- **Active Learning**: We design the student experience based on engineering educational research findings that demonstrate enhanced learning through active engagement of students, both within the classroom and through personalized and team-based opportunities such as design projects, discovery learning, service learning, internships and leadership programs.

- **Inclusive Excellence**: To improve the educational experience and better serve global society, we are committed to building a culture of inclusive excellence of diverse faculty, staff and students with high ethical and performance standards.

The college seeks the following outcomes in our graduates:

- Technical excellence and knowledge in modern engineering, mathematics and science
- Ability to communicate effectively with diverse peoples and other cultures
- Ability to think critically, analyze data and formulate and solve complex problems
- Ability to contribute effectively as individuals and in multidisciplinary teams
- Knowledge of contemporary issues and preparation for societal leadership and world citizenship
- Desire and skills for lifelong learning and personal and professional development
- Passion for serving others and commitment to sustainability

Degree Programs

Graduate degrees are offered in the following areas:

1. aerospace engineering sciences (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/aerospace-engineering-sciences)
2. architectural engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/architectural-engineering)
3. chemical engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/chemical-engineering)
4. civil engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/civil-engineering)
5. computer science (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/computer-science)
6. electrical engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/electrical-engineering)
7. engineering management (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/engineering-management)
8. environmental engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/environmental-engineering)
9. materials science and engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/materials-science-engineering)
10. mechanical engineering (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/mechanical-engineering)
11. technology, media, and society (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/technology-media-society)
12. interdisciplinary telecommunications (catalog.colorado.edu/graduate/colleges-schools/engineering-applied-science/programs-study/telecommunications)