Overview
Gain the industry-specific skills you need to advance your career on the management side of engineering with a master’s in engineering management. Our master of engineering management program blends engineering processes with business elements to give you the perfect combination of management concepts and technical focus. You’ll receive practical managerial experience guided by expert faculty from Colorado State University’s renowned engineering and business colleges. When you earn your engineering management degree online, you will learn what it takes to manage engineering teams, projects, and business interfaces so you are capable of making the critical decisions for advancing product development.

The curriculum maps to the American Society of Mechanical Engineers (ASME) Knowledge Base standards, so you benefit from coursework based on professional standards and industry demand. With our master’s in engineering management program, you will master concepts in:

• Engineering project management and maintenance
• Business analysis, communication, finance, and marketing
• Systems engineering foundations and architecture
• Procurement and supply chain management

Learning Experience
All courses are delivered online via our learning management system called Canvas. The system allows you to watch recorded, campus-based lectures and engage in course content and communicate with peers online. Courses are asynchronous, allowing you to study at the time that best fits your schedule.

Although the online format of this degree offers flexibility, it still requires the same amount of work and time as an on-campus graduate program. Depending on your learning and studying style, expect to spend nine to twelve hours per week on a three-credit course. This will vary depending on your learning and studying style.

Modern business and technology demands require more complex and timely responses for the design, development, and commercialization of products and processes on a global basis. This degree gives students the skills they need to assume leadership roles within their industries or organizations, helping them think critically about complex issues.

Gary Caille
Engineering Professor

Contact our Student Success Team to get started! (970) 492-4898 online.colostate.edu/contact
Minimum Admission Requirements

- Bachelor’s degree in engineering or engineering-related field
- Minimum GPA of 3.0 on a 4.0 scale or first class standing*
- Calculus 1, 2, and 3*
- Ordinary differential equations*
- Physics 1 and 2 (calculus-based)*
- For international students: The minimum TOEFL score for admission without condition is 80, and IELTS is 6.5.
- GRE test scores are not required, but may be submitted if you feel these will strengthen your application.

*If you do not meet minimum requirements, please contact megadstudies@engr.colostate.edu to get your transcripts/credentials evaluated before formally applying for the program. Depending on academic background, students without a bachelor’s degree in mechanical engineering may also be required to take additional courses. Please use the following email subject line: ME Online – Admission Inquiry – YOUR NAME.

Completion Requirements

- A minimum of 30 credits; 21 credits of engineering courses, nine credits of business courses
- 24 credits must be earned at Colorado State University, 21 of which must be earned after formal admission.
- This is a coursework-only degree; a thesis, project paper, or final examination is not required. Professional experience is not required, but strongly preferred.

Curriculum

Engineering courses

- ENGR 501 – Foundations of Systems Engineering (3 cr.)
- ENGR 567 – Systems Engineering Architecture (3 cr.)
- MECH 501 – Engineering Project and Program Management (3 cr.)
- MECH 503 – Engineering Maintenance Process (3 cr.)
- MECH 504 – Specification and Procurement of Engineering Systems (3 cr.)
- MECH 512 – Reliability Engineering (3 cr.)
- MECH 513 – Simulation Modeling and Experimentation (3 cr.)

Business Courses

- BUS 601 – Quantitative Business Analysis (2 cr.)
- BUS 625 – Organizational Communication (2 cr.)
- BUS 640 – Financial Principles and Practice (2 cr.)
- BUS 655 – Marketing Management (2 cr.)
- BUS 690A – Contemporary Issues in Business (1-2 cr.)

Career Opportunities

According to the American Society of Mechanical Engineers (ASME), about two-thirds of all engineers spend a substantial portion of their career in management. The demand for engineers with management training and experience is growing as these leadership roles expand. There is an increasing need for people who know how to administer large-scale research projects and budgets that drive product design, development, and commercialization.

With this degree, you will be prepared to advance professionally within your organization or be enabled to find new career opportunities. Technical managers are needed within a myriad of sectors including private organizations, public and government agencies, and military units. You will gain the knowledge and skills needed to make sound, critical decisions that weigh technical advancement with business growth.