**Overview**

Make a bigger impact within your company and enjoy the salary benefits that come with it when you earn your Master of Engineering with a specialization in electrical and computer engineering (ECE) from a leader in engineering research and education.

Whether you’re looking to increase your salary, earn the opportunity to work on higher-level projects, or simply need to keep up with the pace of innovation, our master’s degree in electrical engineering can help you get there. Electrical and computer engineers are in demand across virtually every industry, allowing you to pair your passion with this advanced education.

The customizable curriculum of our online computer engineering degree meets current workforce and skill set needs in the industry.

When you earn your electrical engineering degree online, you’ll learn from renowned faculty on the cutting-edge of engineering research and walk away from this program with knowledge that goes far beyond a textbook with skills to provide real world solutions for tomorrow’s challenges.

"Whether students are looking to increase their salary, earn the opportunity to work on higher-level projects, or simply need to keep up with the pace of innovation, this degree can help them get there."

Tony Maciejewski  
Department Head and ECE professor

**Delivery**  
Online

**Credits**  
30 credits

**Tuition**  
$995 per credit; financial aid and a military discount is available

**Time Frame**  
Can be completed in 2 years.

**Degree Awarded**  
Master of Engineering in Engineering; transcript reflects the Electrical and Computer Engineering specialization

**Offered By**  
Department of Electrical and Computer Engineering

**Learn More**  
[online.colostate.edu/degrees/electrical-computer-engineering](http://online.colostate.edu/degrees/electrical-computer-engineering)
MINIMUM ADMISSION REQUIREMENTS

- Bachelor of Science from a regionally-accredited institution in engineering, computer science, physics, or related field that includes coursework in calculus
- 3.0 GPA in undergraduate degree
- GRE test scores are required
- Only persons with bachelor’s degrees from colleges or universities accredited by the Accreditation Board for Engineering and Technology (ABET) are eligible to apply.

COMPLETION REQUIREMENTS

- You will complete 30 semester credits, 21 of which must be completed after formal admission to Colorado State University. This degree is coursework only; neither a thesis nor oral exam is required.
- Minimum of 21 credits earned at Colorado State must be at 500-level or higher
- Up to 15 credits of coursework may be taken outside of the electrical and computer engineering discipline, subject to approval by the M.E. advisor and the Electrical and Computer Engineering Graduate Committee.
- No independent study, research, internship, supervised college teaching, or practicum credits may be credited toward the degree.
- Up to six credits of 400-level, undergraduate electrical engineering courses can be taken at Colorado State University and used toward the degree.

CURRICULUM

Up to six credits of 500-level, graduate coursework can be transferred from other regionally-accredited institutions; grades must be ‘B’ or higher in transferable coursework.

Select 30 credits from the following courses:

- ECE 452 – Computer Organizations and Architecture (3 cr.)
- ECE 456 – Computer Networks (4 cr.)
- ECE 501 – Foundations of Systems Engineering (3 cr.)
- ECE 505 – Nanostructures: Fundamentals and Applications (3 cr.)
- ECE 506 – Optical Interferometry and Laser Metrology (3 cr.)
- ECE 508 – Introduction to Power System Markets (3 cr.)
- ECE 509 – Signal Processing for Power Systems (3 cr.)
- ECE 510 – Wide Area Monitoring for Power Systems
- ECE 512 – Digital Signal Processing (3 cr.)
- ECE 530 – Overview of Systems Engineering Processes (3 cr.)
- ECE 531 – Engineering Risk Analysis (3 cr.)
- ECE 543 – Accelerator Engineering
- ECE 549 – Radar Systems and Design (3 cr.)
- ECE 552 – Pulsed Power and Intense Beams
- ECE 554 – Computer Architecture (3 cr.)
- ECE 561 – Hardware/Software Design of Embedded Systems (4 cr.)
- ECE 565 – Electrical Power Engineering (3 cr.)
- ECE 566 – Grid Integration of Wind Energy Systems (3 cr.)
- ECE 567 – Systems Engineering Architecture (3 cr.)
- ECE 568 – Electrical Energy Generation Systems (3 cr.)
- ECE 574 – Optical Properties in Solids
- ECE 611 – Nonlinear Control Systems (3 cr.)
- ECE 612 – Robust Control Systems (3 cr.)
- ECE 622 – Energy Networks and Power Distribution Grids (3 cr.)
- ECE 623 – Electric Power Quality (3 cr.)
- ECE 658 – Internet Engineering (4 cr.)
- ENGR 565 – Electrical Power Engineering (3 cr.)

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