

MASTER OF SCIENCE IN ELECTRICAL ENGINEERING, PLAN A

Arthur C. Clark said, "Any sufficiently advanced technology is indistinguishable from magic." The Master of Science in Electrical Engineering, Plan A produces leaders who make the magic happen in our modern world. From electric cars to smartphones to Global Positioning Systems, our graduates turn ideas into reality.

This program creates professionals with depth and breadth of knowledge, as well as the skills and mindset to continue to evolve and grow in a constantly changing high-tech environment. Offering a highly customizable curriculum, this program specializes in the following focus areas: biomedical engineering, communications and signal processing, computer engineering, controls and robotics, electromagnetics and remote sensing, lasers and photonics.

Students pursuing the M.S. in Electrical Engineering, Plan A complete a research-oriented plan of study involving a thesis and coursework. Interested applicants should refer to CSU's Graduate and Professional Bulletin (<http://catalog.colostate.edu/general-catalog/graduate-bulletin/>) and the Electrical and Computer Engineering website (<http://www.engr.colostate.edu/ece/>).

Program Learning Objectives

1. Identify, formulate, and solve advanced engineering problems using fundamental electrical engineering principles, methodologies, and tools
2. Apply in-depth knowledge and creativity in a variety of contexts to achieve a significant research objective.
3. Demonstrate effective oral and written communication to convey technical concepts to both engineers and non-engineers.
4. Demonstrate professional behavior and understand the ethical, economic, environmental, and societal impacts of their work.

Institutional Learning Objectives

Program Learning Objectives (PLOs) align with and support the University's Institutional Learning Objectives (ILOs), which are Creativity, Reasoning, Communication, Responsibility, and Collaboration.

Creativity: PLOs 1 and 2 ensure that students can creatively apply their disciplinary expertise to solve complex problems using fundamental electrical engineering principles and methods.

Reasoning: PLOs 1 and 2 ensure that students can apply reasoning skills to solve complex problems using fundamental electrical engineering principles and methods.

Communication: PLO 3 ensures that students demonstrate effective communication to a variety of audiences.

Responsibility: PLO 4 ensures that students exhibit responsible behavior according to professional standards.

Collaboration: PLOs 3 and 4 ensure that students demonstrate professional skills to engage collaboratively to solve problems in a societal context.