

# ELECTRICAL AND COMPUTER ENGINEERING: PROFESSIONAL, MS

This is a named option in the Electrical and Computer Engineering MS (<https://guide.wisc.edu/graduate/electrical-computer-engineering/electrical-computer-engineering-ms/>).

The Electrical and Computer Engineering Department (ECE) offers the Electrical and Computer Engineering MS-Professional named option program for students looking for an advanced entry into industrial electrical engineering.

It is designed to deepen the student's technical knowledge and sharpen their professional skills for a well-prepared entry into industry. The program provides a practical focus through a course-only curriculum, an accelerated and predictable 16-month completion time, and a professional development component. Well-prepared students and UW-Madison undergraduates may find it feasible to complete the program in 12 months.

The student, in consultation with an academic advisor, will choose courses that align well academically and target their career interests. When applying for the ECE MS-Professional program, students are required to choose an area of emphasis: Computer Engineering, Electromagnetic Fields and Waves, Solid State and Photonics, Energy and Power Systems, or a specified curriculum path of their own design. The coursework is customized based on the student's technical interests and is taught by faculty conducting cutting-edge research in their respective fields. The goal of the student's studies is to expand their knowledge in new technologies, design methods, and analysis techniques. The combined focus on technical skills and professional development will prepare graduates to assume leadership positions in industry.

The focus of the Professional program differs from the traditional research-based MS program. MS-Professional students do not conduct independent research and prepare a thesis, but rather have an accelerated course plan in a specialty area with a professional development component, either via an internship/co-op, an independent project, or through courses from Engineering Professional Development. If you are interested in research and advanced concept development, you are better served pursuing a research-based MS program or a PhD program. If you want to complete your degree **within 16 months** and enter the workforce, then the MS-Professional program is right for you.

MS-Professional students cannot be simultaneously enrolled in another graduate program at UW-Madison while completing this program.

After completing the program, students will earn a diploma stating "Master of Science in Electrical and Computer Engineering," and the transcript will include the indication "Named Option: Professional."

For more information on this specific degree plan, please visit the [program website \(https://advanceyourcareer.wisc.edu/degrees/electrical-engineering/\)](https://advanceyourcareer.wisc.edu/degrees/electrical-engineering/).