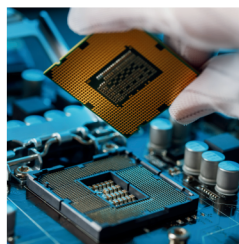# M.S. in Electrical and Computer Engineering

The M.S. in Electrical and Computer Engineering (ECE) aims to deepen technical expertise in areas such as signal processing, telecommunications, and embedded systems, while also focusing on computer engineering aspects like computer architecture and software development. The program fosters research and innovation, enhancing problem-solving skills for complex engineering challenges.

WHAT TO EXPECT

- **Problem-solving** using in-depth knowledge of both computer hardware and software, and, more importantly, their interaction.

- **Competence in the design** of future digital computing systems.

- **Courses in application areas,** including circuit design, telecommunications, robotics, artificial intelligence, cybersecurity, and quantum computing.

- **Explore new ideas** and advance knowledge with the opportunity to complete a research thesis.

> **Studying for the M.S. in electrical and computer engineering equips you with the skills to design, analyze, and develop both hardware and software systems. You'll delve into the intricacies of circuit design, signal processing, and embedded systems, while also mastering programming, algorithms, and data structures."**
>
> - Craig Gotsman, Professor, Electrical and Computer Engineering

FAST FACTS

$110k Average Salary	**90%** Graduate Job Ready	**Up to 50%** Tuition Waivers
10+ Faculty Members	**Not Required** GRE Scores	**We are** STEM Certified

- Closely-connected corporate network.
- Innovation and entrepreneurship support platforms for student ventures.
- Program suitable for working professionals.

CURRICULUM CONCENTRATIONS

- **Artificial Intelligence (AI):** Participate in the ongoing revolution that produces software with problem-solving and content-generating abilities, complementing and enhancing human abilities.

- **Cybersecurity:** Construct and maintain secure software systems and tools to ensure the integrity of data and network communication.

WHY CHOOSE ELECTRICAL AND COMPUTER ENGINEERING AT THE U

- The University of Miami ranks #63 among U.S. universities, according to *U.S. News and World Report.*

- We maintain strong ties with tech companies across Florida, facilitating internships and job placements.

- Miami ranks #1 for startup activity in the U.S. according to the Kaufmann index.

- Miami is #3 among top emerging tech hubs in the U.S. according to *Mashable*.

- Our program offers evening classes to accommodate your schedule.

- No prior bachelor's degree in engineering required.

CORPORATE PARTNERS

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> **The MS in ECE program, with its strong emphasis on artificial intelligence, provided me with invaluable exposure to cutting-edge topics through courses that combined rigorous theoretical instruction with hands-on projects, enabling me to apply advanced AI techniques to solve real-world problems. These experiences bridged the gap between theory and practice, equipping me with the skills to translate academic research into impactful engineering solutions."**

- Qisong Zheng, MS in ECE, 2025

For more information

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