

PROGRAM BREAKDOWN

Master of Science in Computer Engineering

MASTER'S DEGREE IN COMPUTER ENGINEERING

SENTENCE/PHRASE

The AU **Master's Degree in Computer Engineering** is ideal for tech professionals who want to take their computing knowledge to the next level. If you're here, then we're going to go ahead and assume that you already know the basics. You've probably got some basic knowledge of computer engineering (and real-life experience, to boot!). But you're always looking for something more, right? That's awesome. So are we.

This graduate degree is unlike anything you've ever encountered before. The curriculum is designed by professionals, for professionals... And that's because the pro's are the ones giving the class! The faculty at the School of Engineering is jam-packed of thought leaders and industry experts with decades' worth of involvement in the field.

They're the ones who will teach you the industry secrets and will guide you as you advance in your career as a Computer Engineer. So... What are you waiting for? Acquire the skills you need in order to dominate the ever-shifting tech landscape.

THE OBJECTIVES

- To teach professionals how to design and integrate software and hardware components into IT systems.
- To give students the technical tools they need in order to confidently manage electronically controlled systems and devices.

THE JOB PROSPECTS

Don't let the name fool you. Even though Computer Engineering sounds like a highly-specialized career –and it certainly is, in many ways– there's so much you can do with that knowledge. Your particular skill set won't limit you. If anything, it'll open even more doors!

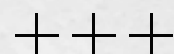
And in this field, no two “doors” (AKA, jobs) are exactly alike. Some of the top employment options include becoming a Big Data Engineer, Data Scientist, Blockchain Developer, Computer Network Architect... Long story short, becoming the coolest tech nerd in town.

EDUCATION LEVEL

MASTER'S DEGREE

The **Master of Science in Computer Engineering** is a graduate program that requires 30 Credit Hours and is taught over the course of 10 modules. The program is designed to be completed in approximately 20 months (80 weeks).

Students will take courses in Wireless Communications, Embedded Systems, Computer Architecture, and Advanced Network Security, among others. In order to graduate, they will have to complete two assignments: a Final Research Project and a Capstone Field Project.



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(30 Graduate Level Semester Credit Hours – Estimated Completion Time 20 months)

Students enrolled in the Masters of Science in Computer Engineering must complete the following for graduation:

- 12 credits from the core courses.
- 3 credits for the final capstone project.
- 15 credits from the technical courses.
- Complete the three (3) co-requisite courses.

COURSE NUMBER	COURSE NAME	CREDIT HOURS
Core Courses (12 credits).		
MET 510	Network Systems and Technologies	3 credit hours
MET 520	Cloud Computing and Data Analytics	3 credit hours
MET 530	Information Security	3 credit hours
MET 540	Systems Integration and Architecture	3 credit hours
Technical Courses - 15 Credits		
Computer Systems (6 Credits Required): Choose two courses from the below		
EGN 508	Enterprise Client-server Software	3 credit hours
EGN 514	Wireless Communications	3 credit hours
EGN 545	Introduction to Embedded Systems	3 credit hours
MIT 588	Software Development and Management	3 credit hours
MIT 562	Programming and Applications Development	3 credit hours
MIT 602	ITIL Service Oriented Architecture	3 credit hours
Computer Theory (3 Credits Required): Choose two courses from the below		
EGN 512	High-Performance Programming with Multicore GPUs	3 credit hours
MIT 534	Governance and Compliance	3 credit hours
MIT 622	High Performance Databases	3 credit hours
Project Management (6 Credits Required): Choose two courses from the below		
MBA 675	IT and Business Transformation (IBIT)	3 credit hours
MBA 702	Operations and Project Management	3 credit hours
EGN 649	Research Project	3 credit hours
MCS 626	IT Operations	3 credit hours
MIT 501	E-Business Technology and Management	3 credit hours
Final Research Project – 3 credits		
EGN 699	Final project (Capstone)	3 credit hours
Degree requirements (3 co-requisite courses - No credit): All students must complete the three co-requisite courses as part of the requirement for graduation.		
LIS 400	Information Resources for Academic and Professional Success	3 credit hours
LIS 500	Scholarly Writing and Research Strategies	3 credit hours
LIS 700	Research Methodology	3 credit hours