Overview
The Master of Science in Wireless and Network Engineering is administered by the Institute for the Wireless Internet of Things and the Department of Electrical and Computer Engineering. This program is aimed at preparing highly qualified researchers and a specialized workforce that will lead the future of our hyperconnected society. The program will provide students with the necessary knowledge and skills to understand, design, and implement present and future wireless and wired communication networks through a combination of coursework, master thesis research, and/or industry experience.

Program Requirements
Core Requirements
Code | Title | Hours
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EECE 5576 | Wireless Communication Systems | 8
EECE 7364 | Mobile and Wireless Networking | 8
EECE 7374 | Fundamentals of Computer Networks | 8

Complete two of the following:

Options
COURSEWORK OPTION
Code | Title | Hours
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Complete 24 semester hours from the course list below. | 24

THESIS OPTION
Code | Title | Hours
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EECE 7990 | Thesis | 8

Complete 16 semester hours from the course list below. | 16

Course List

Electrical and Computer Engineering
Code | Title | Hours
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EECE 5155 | Wireless Sensor Networks and the Internet of Things | 3
EECE 5360 | Combinatorial Optimization | 3
EECE 5610 | Digital Control Systems | 3
EECE 5612 | Statistical Inference: An Introduction for Engineers and Data Analysts | 3
EECE 5640 | High-Performance Computing | 3
EECE 5641 | Introduction to Software Security | 3
EECE 5643 | Simulation and Performance Evaluation | 3
EECE 5644 | Introduction to Machine Learning and Pattern Recognition | 3
EECE 5645 | Parallel Processing for Data Analytics | 3
EECE 5666 | Digital Signal Processing | 3
EECE 5693 | Electromagnetic Devices for RF and Wireless Communications | 3
EECE 5697 | Acoustics and Sensing | 3
EECE 5698 | Special Topics in Electrical and Computer Engineering (GNSS Signal Processing) | 3
EECE 5699 | Computer Hardware and System Security | 3
EECE 7200 | Linear Systems Analysis | 3
EECE 7202 | Electromagnetic Theory 1 | 3
EECE 7204 | Applied Probability and Stochastic Processes | 3
EECE 7205 | Fundamentals of Computer Engineering | 3
EECE 7242 | Integrated Circuits for Mixed Signals and Data Communication | 3
EECE 7245 | Microwave Circuit Design for Wireless Communication | 3
EECE 7247 | Radio Frequency Integrated Circuit Design | 3
EECE 7275 | Antennas and Radiation | 3
EECE 7336 | Digital Communications | 3
EECE 7337 | Information Theory | 3
EECE 7345 | Big Data and Sparsity in Control, Machine Learning, and Optimization | 3
EECE 7352 | Computer Architecture | 3
EECE 7398 | Special Topics (Wireless Networks Systems and Applications) | 3
EECE 7398 | Special Topics (Terahertz Communications) | 3
EECE 7398 | Special Topics (An Experimental Approach to Wireless Communications) | 3
EECE 7400 | Special Problems in Electrical and Computer Engineering | 3

Computer Science
Code | Title | Hours
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CS 5520 | Mobile Application Development | 3
CS 5610 | Web Development | 3
CS 6620 | Fundamentals of Cloud Computing | 3
CS 6650 | Building Scalable Distributed Systems | 3
CS 7610 | Foundations of Distributed Systems | 3

Cybersecurity
Code | Title | Hours
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CY 6740 | Network Security | 3

Program Credit/GPA Requirements
32 total semester hours required
Minimum 3.000 GPA required