M.S. DEGREE
How to Plan Your Program of Study

PREREQUISITES
CEG5310 Computer Organization
CEG5350 Oprtng Systms Internals & Design
CS5160 Computer Science Fundamentals
CS5100 Data Struc & Algorithms
CEG5320 Digital System Design

1. Complete all assigned prerequisite courses
2. Complete the core courses for your Major
3. Choose a focus area and take courses within that area.
4. Make sure the courses satisfy the graduation requirement of your program

CHOOSE YOUR MAJOR

Masters of Science
Computer Science
CS 7200
AND
CS 7100 or CS7140 or CEG7370
Thesis Option:
- Maximum 9 hours of thesis
- Minimum 16 hours of CS courses, including the core courses
- Minimum 6 hours of 7000-level formal courses in addition to the core
- Maximum 3 hours of independent study
Non-thesis Option:
- Minimum 16 hours of CS courses, including the core courses
- Minimum 12 hours of 7000-level formal courses in addition to the core
- Maximum 3 hours of independent study

Masters of Science
Computer Engineering
CEG 7360
AND
CS 7100 or CS7140 or CEG7370
Thesis Option:
- Maximum 9 hours of thesis
- Minimum 16 hours of CEG courses, including the core courses
- Minimum 6 hours of 7000-level formal courses in addition to the core
- Maximum 3 hours of independent study
Non-thesis Option:
- Minimum 16 hours of CEG courses, including the core courses
- Minimum 12 hours of 7000-level formal courses in addition to the core
- Maximum 3 hours of independent study

Masters of Science
Cyber Security
CEG 6430, CEG 6420, CEG 6424, CEG 6750
Domain Areas:
1) Information and privacy protection, 2) Systems and network security, 3) Cyber physical systems, 4) Secure pervasive computing, 5) Surveillance and detection systems, and 6) trustworthy platforms

Project Option:
- Twelve (12) credit hours of advanced coursework within the six domain areas
- Six (6) credit hours security project

Thesis Option:
- Nine (9) credit hours of advanced coursework within the following six domain areas
- Nine (9) credit hours of thesis

CHOOSE YOUR FOCUS

We offer courses that will allow you to focus your degree in these areas.

- Software
- Hardware
- Intelligent Systems
- Data Analysis
- Vision and Graphics

- Mathematics of Computation
- Secure Software or Hardware
CEG6110 Intro to Software Engr
CEG6120 Managing Sofw/Dev Proces
CEG6130 Pers Sofw/Dev Process
CEG6180 Obj-Orient Prog & Desig
CEG6230 Intro Robotics
CEG6260 Matrix Computations
CEG6322 VLSI Design
CEG6324 Dig Integ Ckt Design
CEG6326 IC Hardware Security and Trust
CEG6330 Micropro Embedded System
CEG6360 Distrib Sys & Cloud Comp
CEG6400 Comp Networks & Security
CEG6410 Mobile Computing
CEG6420 Host Computer Security
CEG6422 Secure Computing Pract
CEG6424 Security Attacks & Def
CEG6426 Legal Aspects Cyber Sec
CEG6430 Cyber Network Security
CEG6440 Android Int & Security
CEG6450 Sensor Net and Systems
CEG6500 Computer Graphics
CEG6510 3D Modeling/Animation
CEG6520 Sci Vis and Virt Env
CEG6750 Information Security
CEG6870 Intro Intel Cont Sys
CEG6900 Special Topics in CEG
CEG6970 Independent Study in CEG
CEG6440 Android Int & Security
CEG6450 Sensor Net and Systems
CEG6500 Computer Graphics
CEG6510 3D Modeling/Animation
CEG6520 Sci Vis and Virt Env
CEG6750 Information Security
CEG6870 Intro Intel Cont Sys
CEG6900 Special Topics in CEG
CEG6970 Independent Study in CEG
CEG7020 Low Pwr VLSI Sys Des
CEG7030 VLSI Des Synth Optim
CEG7040 VLSI Testing Design
CEG7050 Trust Integ Ckt Design
CEG7060 Advanced Robotics
CEG7080 CMOS Mxd Sig IC Des
CEG7350 Computer Architecture
CEG7360 Embedded Systems
CEG7370 Distributed Computing
CEG7380 Cloud Computing
CEG7420 Rev Egr & Prog Analysis
CEG7450 Adv. Comp. Networks
CEG7470 Adv. Wireless Networks
CEG7550 Computer Vision & Pattern Recogn
CEG7560 Visual & Image Process
CEG7570 Pattern Recognition
CEG7580 Digital Image Processing
CEG7590 Medical Image Analysis
CEG7900 Selected Topics in CEG
CEG7920 Independent Study in CEG
CEG7950 MSCEG Thesis Research
CEG7980 Part-time CPT in CEG
CEG7990 Full-time CPT in CEG

CS6100 Grad Research Prog Prac
CS6240 Coding Theory
CS6270 Optimization Techniques
CS6280 Combinatorics and Graphs
CS6290 Cryptography Data Secur
CS6370 Par Prog Many-Core GPUs
CS6700 Database Management Systems
CS6710 Intro to Data Mining
CS6800 Web Information Systems
CS6810 Bioinformatic Algorithms
CS6830 Systems Simulation
CS6840 Intro Machine Learning
CS6850 Foundations of AI
CS6900 Special Topics in CS
CS6970 Independent Study in CS
CS7060 Numerical Analysis I
CS7070 Numerical Analysis II
CS7100 Adv. Prog. Languages
CS7120 Functional & Logic Prog.
CS7140 Adv Software Engineering
CS7200 Alg. Design and Analysis
CS7200 Alg. Design and Analysis
CS7210 Network Science
CS7220 Computability/Complexity
CS7230 Information Theory
CS7600 Trust Networks
CS7700 Adv. Database Systems
CS7720 Advanced Data Mining
CS7800 Information Retrieval
CS7810 Meta Represent Languages
CS7820 Semantic Web
CS7830 Machine Learning
CS7840 Soft Computing
CS7850 Privacy Aware Computing
CS7900 Special Topics in CS