

AUBURN UNIVERSITY AT MONTGOMERY

Computer Science Department Master of Computer Information System Cybersecurity Degree Study Plan

Name: AUM email: Personal email: S Number: Phone #:

1st Semester Enrolled:

- Students with Bachelor's degree in Computer Science from American Universities need to see Faculty Advisor in the first semester of graduate studies.
- Maximum number of courses suggested for Fall, Spring and Summer semesters are: 3, 3, 2
- Pre-requisite(s) for the course has to be C or above before you can register that course

| Required Admission Foundation Course | Semester | Grade | Hours | Notes |
|---|-----------------|-------|-------|---|
| CSCI 5003: C++ Programming Language & Lab <i>Tuition waived:</i> a foundational course required for entrance of the program. For those who want to waive this course, please contact OGI (Office of Global Initiative) to register the Assessment Exam during New Student Orientation event. Minimum C to pass, otherwise repeat | 1 st | | 4 | "A" in this course to be qualified as candidate for future Graduate Teaching or Research Assistant job |
| ENGL 6100: Graduate Communication Skills <i>If it is required on your admission letter</i> . | | | 3 | |

Core Courses: (28-30 credits)

| # | Course | Semester | Grade | Hours | Pre-requisite |
|---|---|-----------------|--------------|-------|-------------------|
| 1 | CSIS 6010 Linux/Unix for Cybersecurity | 1 st | | 3 | None |
| 2 | CSIS 6040 Cryptography | 1 st | Fall only | 3 | None |
| | | or later | | | |
| 3 | CSCI 6060 Computer Architecture | 1 st | | 3 | None |
| 3 | | or later | | | None |
| | | | | - | |
| 4 | CSCI 6163 Python Programming Language & Lab | 2 nd | | 4 | CSCI 6403 or CSIS |
| 4 | | | | | 6010 |
| 5 | CSCI 6150 Operating Systems | 2 nd | Spring | 3 | CSCI 6060 |
| 5 | | or later | only | | 0000 |
| 6 | CSCI 6170 Advanced Network Systems | 2 nd | Fall | 3 | CSCI 6060 |
| 0 | | or later | only | | 0000 |
| | | | | | |
| 7 | CSIS 6080 Digital Forensics | 3 rd | Spring | 3 | CSIS 6010 and |
| / | | | only | | CSCI 6163 |
| 8 | CSIS 6020 Ethical Hacking and Penetration Testing & Lab | 3 rd | Spring | 3-4 | CSIS 6010 and |
| 0 | | | only | | CSCI 6163 |
| 9 | CSIS 6013 Network Security and Reliability & Lab | 3 rd | Fall | 3-4 | CSIS 6010 and |
| 9 | | | only | | CSCI 6163 |

Elective Courses: (select minimum 3-5 credits)

| 6000-level CSCI, CSIS, GIS courses | Semester | Grade | Hours | Pre-requisite |
|---|----------|-------|-------|----------------------------|
| CSCI 6924 Computer Science Internship | | | 1-3 | None |
| CSIS 6033 Computer & Software Security | | | 3 | CSIS 6010 and CSCI 6163 |
| CSIS 6992 MS Cybersecurity Research Thesis | | | 3 | None |
| CSIS 6912 Supervised Practicum | | | 3 | CSCI 5000 |
| CSIS 6973 Special Topics in Cyber Security | | | 3 | None |
| GEOG 6850 Introduction to GIS | | | 3 | None |
| GEOG 6870 GIS for Health Professionals | | | 3 | None |
| GEOG 6920 Python Scripting for GIS | | | 3 | GEOG 6850 |
| GEOG 6910 Advanced GIS | | | 3 | GEOG 6850 |
| GEOG 6203 Open Source GIS and Web mapping | | | 3 | GEOG 6850 |
| CSCI 6000 Data Structure & Algorithms Design and Analysis | | | 3 | CSCI 5000 |
| CSCI 6030 Front-end Web App Development | | | 3 | CSCI 5000 |
| CSCI 6040 Back-end Web App Development | | | 3 | CSCI 6030 and CSCI 6070 |
| CSCI 6050 Software Engineering | | | 3 | CSCI 5000 |
| CSCI 6073 Advanced Database Systems & Lab | | | 4 | CSCI 6000 |
| CSCI 6100 Software Component | | | 3 | CSCI 5000 |
| CSCI 6120 Fundamental 3D Object Modeling | | | 3 | None |
| CSCI 6140 Unity 3D Video Game & VR Dev. | | | 3 | CSCI 6403 |
| CSCI 6200 Theory of Computation and Formal Language | | | 3 | None |
| CSCI 6210 iOS Mobile Computing | | | 3 | CSCI 5000 |
| CSCI 6300 Advanced High-Performance Computing | | | 3 | CSCI 5000 |
| CSCI 6350 Distributed Cloud Computing | | | 3 | CSCI 6070 |
| CSCI 6403 Data Intensive C# Programming & Lab | | | 4 | CSCI 5000 |
| CSCI 6410 Data-driven Responsive Web Computing | | | 3 | CSCI 6403 |
| CSCI 6450 Machine Learning | | | 3 | CSCI 5000 |
| CSCI 6970 Special Topics in Comp. Science | | | 3 | None |

1. Full-time Status for International Students:

- Two (2) courses (minimum 6 credit hours) in Hybrid or Face-to-face sessions if it is student's first semester are required to meet U.S. Immigration Department full-time student VISA requirement.
- In student's final semester, immigration regulations can be met by selecting only one (1) course; however, it must be face-to-face or hybrid. A reduced course load form must be completed and returned to the Office of Global Initiatives.
- If you have \$10,000 scholarship (for example), it will be used for 4 consecutive semesters, which means each semester you can use \$2,500 scholarship towards tuition.
- Beyond the 4 consecutive semesters, you are not qualified for using it. That means if you have a summer semester within this 4 semesters period, and you do not select any course in the summer, you will end up using \$2,500 for only three semesters with total of \$7,500 scholarship, which means \$2,500 tuition scholarship will not be used. The suggestion is select courses in summer.

- 2. Academic Dishonesty Charge Record:
- 3. Student Success Stories: Internship, job offer, etc.: