****

**Computer Science Department**

**Master of Computer Information System Cybersecurity Degree Study Plan**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name:** |  | **S Number:** |  |

**AUM email: Phone #:**

**Personal email: 1st Semester Enrolled:**

* Maximum number of courses suggested for Fall, Spring and Summer semesters are: 3, 3, 2

**Total Credits Required to Graduate: 33 Credits**

**Total GPA Required to Graduate: 3.0 or Higher**

**Core Courses: ( 20 credits)**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Course** | **Semester** | **Grade** | **Credits** | **Pre-requisite** |
| 1 | CSCI 5003: System Programming Language & LabMidterm, Final Exam & Course Grade all are “A”s will be considered as candidate for future Graduate Teaching or Research Assistant job | **1st** |  | 4 | None |
| 2 | CSIS 6010 Linux/Unix for Cybersecurity | **1st**  |  | 3 | None |
| 3 | CSIS 6040 Cryptography | **1st** **or later** | **Fall****only** | 3 | None |
|  |
| 4 | CSCI 6163 Python Programming Language & Lab | **2nd**  |  | 4 | CSCI 5003 or CSIS 6010 |
| 5 | CSCI 6150 Advanced Operating Systems | **2nd**  |  | 3 | CSCI 5003 |
| 6 | CSCI 6170 Advanced Network Systems | **2nd**  |  | 3 | CSCI 5003 |

**Core Electives: minimum 9 credits**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **#** | **Course** | **Semester** | **Grade** | **Credits** | **Pre-requisite** |
| 1 | CSIS 6080 Malware Analysis & Digital Forensics | **3rd** |  | 3 | CSIS 6010 and CSCI 6163 |
| 2 | CSIS 6020 Ethical Hacking and Penetration Testing | **3rd**  |  | 3 | CSIS 6010 and CSCI 6163 and CSCI 6150 |
| 3 | CSIS 6013 Network Security and Reliability  | **3rd** |  | 3 | CSIS 6010 and CSCI 6163, and CSCI 6170 |
| 4 | CSIS 6033 Data Privacy & Cybersecurity  | **3rd** |  | 3 | CSIS 6010 and CSCI 6163 and CSCI 6150 |

**Elective Courses: minimum credits = 4 Credits**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|

|  |
| --- |
|  **6000-level CSCI, CSIS, GIS courses** |

 | **Semester** | **Grade** | **Credits** | **Pre-requisite** |
| CSCI 6924 Computer Science Internship |  |  | 1 | None |
| CSIS 6992 MS Cybersecurity Research Thesis |  |  | 3 | None |
| CSIS 6912 Supervised Practicum |  |  | 3 | CSCI 5003 |
| CSIS 6973 Special Topics in Cyber Security |  |  | 3 | None |
| CSCI 6060 Advanced Computer Architecture |  |  | 3 | None |
| CSCI 6000 Advanced Data Structure & Algorithms Design and Analysis |  |  | 3 | CSCI 5003 |
| CSCI 6030 Front-end Web App Development |  |  | 3 | CSCI 5003 |
| CSCI 6040 Back-end Web App Development  |  |  | 3 | CSCI 6030 andCSCI 6070 |
| CSCI 6050 Software Engineering |  |  | 3 | CSCI 5003 |
| CSCI 6073 Advanced Database Systems & Lab |  |  | 4 | CSCI 6000 |
| CSCI 6100 Software Component  |  |  | 3 | CSCI 5003 |
| 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 5003 |
| CSCI 6300 Advanced High-Performance Computing  |  |  | 3 | CSCI 5003 |
| CSCI 6350 Distributed Cloud Computing  |  |  | 3 | CSCI 6070 |
| CSCI 6403 Data Intensive C# Programming & Lab |  |  | 4 | CSCI 5003 |
| CSCI 6410 Data-driven Responsive Web Computing  |  |  | 3 | CSCI 6403 |
| CSCI 6450 Machine Learning |  |  | 3 | CSCI 5003 |
| CSCI 6970 Special Topics in Comp. Science |  |  | 3 | None |
| GEOG 6850 Introduction to GIS |  |  | 3 | None |
| GEOG 6870 GIS for Health Professionals |  |  | 3 | None |
| GEOG 6890 GIS & Environmental Management |  |  | 3 | GEOG 6850 |
| GEOG 6910 Advanced GIS |  |  | 3 | GEOG 6850 |
| GEOG 6920 Python Scripting for GIS |  |  | 3 | GEOG 6850 |
| GEOG 6940 Remote Sensing |  |  | 3 | GEOG 6850 |
| GEOG 6203 Open Source GIS and Web mapping |  |  | 3 | GEOG 6850 |

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.
1. **Academic Dishonesty Charge Record:**
2. **Student Success Stories: Internship, job offer, etc.:**