

# AUBURN UNIVERSITY AT MONTGOMERY

# Computer Science Department Master of Computer Science Degree Study Plan (33 Credits)

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

# Core Required Courses: (11 credits)

#	Course	Semester	Grade	Credits	Pre-requisite
1	CSCI 5003: System Programming Language & Lab	1 <sup>st</sup>		4	None
2	CSCI 6000: Advanced Data Structure & Algorithms Design and Analysis	2 <sup>nd</sup>		3	CSCI 5003
3	CSCI 6073: Advanced Database Systems & Lab	1 <sup>st</sup>		4	None

#### **Core Electives: minimum 10 credits**

#	Course	Semester	Grade	Credits	Pre-requisite
1	CSCI 6200 Theory of Computation and Formal	1 <sup>st</sup>		3	None
	Language				
2	CSCI 6060 Advanced Computer Architecture	1 <sup>st</sup>		3	None
3	CSCI 6163 Python Programming Language & Lab	2 <sup>nd</sup>		4	CSCI 5003
4	CSCI 6150 Advanced Operating Systems	2 <sup>nd</sup>		3	CSCI 5003
5	CSCI 6170 Advanced Network Systems	2 <sup>nd</sup>		3	CSCI 5003
6	CSCI 6403 Data Intensive C# Programming & Lab	2 <sup>nd</sup>		4	CSCI 5003
7	CSCI 6030 Front-end Web App Development	2 <sup>nd</sup>		3	CSCI 5003
	CSCI 6040 Back-end Web App Development	3 <sup>rd</sup>		3	CSCI 6030
8					(co-requisite)
					& CSCI 6073
9	CSCI 6050 Software Engineering	2 <sup>nd</sup>		3	CSCI 5003
10	CSCI 6100 Software Component	2 <sup>nd</sup>		3	CSCI 5003
11	CSCI 6140 Video Game & VR Dev. & Lab	3 <sup>rd</sup>		3	CSCI 5003
12	CSCI 6350 Distributed Cloud Computing	3 <sup>rd</sup>		3	CSCI 6073
13	CSCI 6450 Machine Learning	3 <sup>rd</sup>		3	CSCI 6163

# Elective Courses: minimum credits = 33 - 11 - Core Elective credits

6000-graduate level CSCI, CSIS, GEOG (GIS ) courses	Semester	Grade	Credits	Pre-requisite
CSCI 6120 Fundamental 3D Object Modeling			3	None
CSCI 6210 iOS Mobile Computing			3	CSCI 5003
CSCI 6300 Advanced High-Performance Computing			3	CSCI 5003
CSCI 6410 Data-driven Responsive Web Computing			3	CSCI 6073
CSCI 6970 Special Topics in Comp. Sci.			3	None
CSIS 6003 Intro to Computer Security			3	None
CSIS 6010 Linux & Unix for Cybersecurity			3	None
CSIS 6013 Network Security & Reliability			3	CSIS 6010
CSIS 6020 Ethical Hacking & Penetration Testing			3	CSIS 6010
CSIS 6033 Data Privacy and Cybersecurity			3	CSIS 6010
CSIS 6040 Cryptography			3	None
CSIS 6080 Malware Analysis and Digital Forensics			3	CSIS 6010
CSIS 6912 Supervised Practicum			3	CSCI 5003
CSIS 6973 Special Topics in Cyber Security			3	None
CSCI 6924 Computer Science Internship			1	None
CSCI 6992 M.S. Research Thesis			3	None
GEOG 6850 Introduction to GIS			3	None
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
GEOG 6980 GIS Database Design			3	GEOG 6850
GEOG 6870 GIS for Health Professionals			3	None
GEOG 6890 GIS & Environmental Management			3	GEOG 6850

# 1. Full-time Status & Scholarship usage 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.: