

# Computer Science M.S. (Hybrid) (Thesis)

## Degree Requirements: 30 Credit Hours

### Admission Requirements

#### Regular Admission

#### Domestic Candidates:

1. Bachelor of Science in Computer Science or in a related field (Computer Engineering, Information Technology, Information Systems, Software Engineering, etc.) from an accredited program OR Bachelor of Science in a non-computing field with at least two years of relevant professional experience in computing.
2. Have a minimum cumulative GPA of 2.5/4.0 or its equivalent.
3. Submit a General GRE score.

#### International Candidates

1. Bachelor of Science in Computer Science or in a related field (for example, Computer Engineering, Information Technology, Information Systems, Software Engineering, etc.).
2. Have a cumulative GPA of 3.0/4.0 or equivalent.
3. Submit a General GRE score.
4. Submit a minimum TOEFL score of 80 (internet-based). The TOEFL will be waived for international applicants who have graduated from a U.S. College or University.

### Provisional Admission

Applicants who meet most (but not all) of the Regular admission requirements may be admitted on a Provisional basis. Applicants granted Provisional admission must earn grades of "B" or higher in the courses taken under the Provisional admission status. Any other conditions of Provisional admission will be stated in the admission letter. Applicants with such admission status may take graduate-level courses counting toward the M.S. degree requirements. It is every student's responsibility to satisfy his or her conditions of admission as soon as possible after acceptance. Prerequisites for provisionally admitted students consist of the following graduate courses:

Requirements	Credit Hours
CSCI 6101 Object-Oriented Programming Using Java	10
CSCI 6102 Data Analytics Using Python	
CSCI 6103 Art of Program Design	
Total Credit Hours	10

### Non-Degree Admission

Applicants who have a high number of deficiencies may be granted Non-Degree admission to the College of Graduate Studies to take a limited number of graduate level courses.

### Program of Study

The graduate student and the graduate advisor shall develop a Program of Study that consists of 30 credits of graduate course work, including 10 credits of core courses, 11 credits of elective classes at the 7000 level, and 9 credits of Thesis (CSCI 7999).

	Credit Hours
<b>Core Requirements</b>	<b>10</b>
CSCI 7130 Artificial Intelligence - Theory and Application	
CSCI 7132 Database Systems Design-Theory and Application	
CSCI 7432 Algorithm Analysis and Data Structures	
CSCI 7630 Current Trends in Computing	
<b>Concentration Required and Electives</b>	<b>11</b>
See Concentrations for CSCI 7XXX courses	
<b>Thesis Option (during the last semester)</b>	<b>9</b>
CSCI 7999 Thesis	
Total Credit Hours	30

### Concentration: Software Engineering

	Credit Hours
<b>Core Requirement</b>	<b>3</b>
CSCI 7532 Advanced Software Engineering	
<b>Concentration Electives</b>	<b>6</b>
Select at least two of the following	
CSCI 7090 Selected Topics in Computer Science	
CSCI 7380 Software Security and Secure Coding	
CSCI 7533 Requirements and Architecture	
CSCI 7534 Testing and Measurement	
<b>Electives</b>	<b>2</b>
Any CSCI 7XXX Course	
Total Credit Hours	11

### Concentration: Software and Cyber Security

	Credit Hours
<b>Core Requirement</b>	<b>3</b>
CSCI 7380 Software Security and Secure Coding	
<b>Concentration Electives</b>	<b>6</b>
Select at least two of the following	
CSCI 7090 Selected Topics in Computer Science	
CSCI 7433 Data and Database Security	
CSCI 7536 Network and Computer Security	
CSCI 7710 Advanced Computer Security	
<b>Electives</b>	<b>2</b>
Any CSCI 7XXX Course	
Total Credit Hours	11

### Concentration: Machine Learning

	Credit Hours
<b>Core Requirement</b>	<b>3</b>
CSCI 7434 Data Mining	
<b>Concentration Electives</b>	<b>6</b>
Select at least two of the following	
CSCI 7090 Selected Topics in Computer Science	
CSCI 7435 Data Warehousing	
CSCI 7501 Computational Intelligence	
CSCI 7510 Decision Support Systems	
<b>Electives</b>	<b>2</b>
Any CSCI 7XXX Courses	
Total Credit Hours	11

## Concentration: Data and Knowledge Systems

Phone: 912-478-COGS (2647)  
Email: gradschool@georgiasouthern.edu

	Credit Hours
<b>Core Requirements</b>	<b>3</b>
CSCI 7434 Data Mining	
<b>Concentration Electives</b>	<b>6</b>
Select at least two of the following	
CSCI 7090 Selected Topics in Computer Science	
CSCI 7431 Distributed Database Systems	
CSCI 7435 Data Warehousing	
CSCI 7510 Decision Support Systems	
<b>Electives</b>	<b>2</b>
Any CSCI 7XXX courses	
<b>Total Credit Hours</b>	<b>11</b>

Students with a GPA over 3.8 are encouraged to take the Master's Thesis option.

## Accelerated Bachelors to Masters (ABM)

### Degree Requirements: 30 Credit Hours

In accordance with SACSCOC requirements, 120 unique credit hours are required in a Bachelors degree program, and at least 30 unique credit hours are required for a Masters degree program. The **MSCS-ABM** program combines **124** hours from the **BS Computer Science program** and **30** hours from the **MSCS program**, exceeding the required 150 unique hours between undergraduate and graduate degree programs by **4** hours. The *Jack N. Averitt College of Graduate Studies Handbook for Program Directors and Graduate Advisors* permits a maximum of 9 shared credit hours between the undergraduate and graduate degree programs. Therefore, **MSCS-ABM** students may share a maximum of **4** credit hours of graduate level courses (5000G) in satisfying the requirements of both degree programs.

### Admission Requirements

For regular admission to the Accelerated Bachelor's to Master's of Science in Computer Science (ABM-MSCS) degree program, the applicant must have:

1. Enrollment as a current Georgia Southern undergraduate student majoring in Computer Science.
2. Between 75 and 95 (inclusive) credit hours completed in the undergraduate program; including the courses CSCI 1301, CSCI 1302, CSCI 3230 and CSCI 3236, each with a grade of C or better.
3. A 3.0 (4.0 scale) GPA in computer science undergraduate coursework.

ABM programs do not allow provisional admission. ABM programs are designed for students who have demonstrated a high level of undergraduate academic performance that validates their ability to be successful graduate students. Students who do not meet the minimum requirements for regular admission may be granted admission to the program upon approval of an admissions committee consisting of at least the Department Chair and the Graduate Program director.

### Advisement

Graduate students are advised by their program. Graduate students should reach out to their graduate program director for information regarding the structures in place to facilitate advisement. For more information visit the Graduate Academic Advisement (<http://catalog.georgiasouthern.edu/graduate/graduate-studies/general-graduate-policies-procedures/advisement/>) catalog page.

Graduate students can also contact the Jack N. Averitt College of Graduate Studies for more information about their program director.