

Student ID: _____
 Student Name: _____
 Adviser Name: _____

Catalog: 2019-2020 Undergraduate Catalog
 Program: Computer Information Systems, BS
 Minimum Credits Required: _____

Computer Information Systems, BS

Program Description

The Computer Information Systems degree program is oriented toward computer applications in management-related problems. The program emphasizes functional areas of management, including accounting, production, marketing, and finance and the applications of computers in these areas. The curriculum is designed to prepare students for careers in areas such as systems design and analysis, applications programming, database administration, and information retrieval, as well as for continued study toward an advanced degree.

Students who change majors into Computer Information Systems must have a cumulative grade-point average of 2.0 or higher.

Additional information about the major, curriculum, and advising can be found at <http://www.clemson.edu/computing/>.

Program Requirements

Freshman Year

First Semester

Course Name	Credit Hours	Term Taken	Grade	Gen Ed
ENGL 1030 - Composition and Rhetoric	3 Credits			
MATH 1020 - Business Calculus I ¹ or	3 Credits			
MATH 1060 - Calculus of One Variable I ¹	4 Credits			
<ul style="list-style-type: none"> • Introduction to Computing Requirement 4 Credits ² • Natural Science Requirement 4 Credits ³ • Elective 1 Credits ¹ 				

Credit Hours: 15

Second Semester

Course Name	Credit Hours	Term Taken	Grade	Gen Ed
MATH 2070 - Business Calculus II ¹ or	3 Credits			
MATH 1080 - Calculus of One Variable II ¹	4 Credits			
<ul style="list-style-type: none"> • Arts and Humanities (Non-Lit.) Requirement 3 Credits ⁴ • Introduction to Computing Requirement 4 Credits ² • Natural Science Requirement 3 Credits ³ • Social Science Requirement 3 Credits ⁴ • Elective 1 Credits ¹ 				

Credit Hours: 17

Sophomore Year

First Semester

Course Name	Credit Hours	Term Taken	Grade	Gen Ed
CPSC 2070 - Discrete Structures for Computing ⁵	3 Credits			
CPSC 2120 - Algorithms and Data Structures	4 Credits			
<ul style="list-style-type: none"> • Arts and Humanities (Literature) Requirement 3 Credits ⁴ • Oral Communication Requirement 3 Credits ⁶ 				

• Social Science Requirement 3 Credits ⁴				
Credit Hours: 16				
Second Semester				
Course Name	Credit Hours	Term Taken	Grade	Gen Ed
CPSC 2150 - Software Development Foundations	3 Credits			
CPSC 2310 - Introduction to Computer Organization	4 Credits			
CPSC 2910 - Seminar in Professional Issues I	1 Credits			
MGT 2010 - Principles of Management	3 Credits			
STAT 3090 - Introductory Business Statistics ⁷	3 Credits			
Credit Hours: 14				
Junior Year				
First Semester				
Course Name	Credit Hours	Term Taken	Grade	Gen Ed
ACCT 2010 - Financial Accounting Concepts	3 Credits			
CPSC 2200 - Problem Solving with Office Applications	3 Credits			
CPSC (ECE) 3220 - Introduction to Operating Systems	3 Credits			
CPSC 3720 - Introduction to Software Engineering	3 Credits			
• Writing Requirement 3 Credits ⁸				
Credit Hours: 15				
Second Semester				
Course Name	Credit Hours	Term Taken	Grade	Gen Ed
ACCT 2020 - Managerial Accounting Concepts	3 Credits			
CPSC 3600 - Networks and Network Programming	3 Credits			
CPSC 3710 - Systems Analysis <i>or</i>	3 Credits			
MGT 4520 - Business Analysis	3 Credits			
• Computer Science Technical Requirement 3 Credits ⁹				
• Economics Requirement 3 Credits ¹⁰				
Credit Hours: 15				
Senior Year				
First Semester				
Course Name	Credit Hours	Term Taken	Grade	Gen Ed
CPSC 4200 - Computer Security Principles <i>or</i>	3 Credits			
CPSC 4240 - System Administration and Security	3 Credits			
CPSC 4620 - Database Management Systems	3 Credits			
CPSC 4910 - Seminar in Professional Issues II	3 Credits			
• Business Requirement 3 Credits ¹¹				
• Computer Science Technical Requirement 3 Credits ⁹				
Credit Hours: 15				
Second Semester				
Course Name	Credit Hours	Term Taken	Grade	Gen Ed

MGT 3120 - Decision Models for Management	3 Credits			
MKT 3010 - Principles of Marketing	3 Credits			
<ul style="list-style-type: none"> • Business Requirement 3 Credits ¹¹ • Computer Science Technical Requirement 3 Credits ⁹ • Information Systems Requirement 3 Credits ¹² 				

Credit Hours: 15

Total Credits: 122

Footnotes

¹ Select either the MATH 1020/MATH 2070, MATH 1060/MATH 2070 or MATH 1060/MATH 1080 sequence. Students who select the 1060/1080 sequence will have satisfied the two elective credits in the freshman year.

² Select either the CPSC 1010 and CPSC 1020 sequence; or the CPSC 1060 and CPSC 1070 sequence. The sequence of CPSC 1110 and CPSC 1020 is also acceptable with one elective credit taken in the first semester.

³ Select from courses in BIOL, BCHM, CH, GEOL, MICR, PHYS; or ENSP 2000. At least one course must include a laboratory and satisfy the Natural Science General Education Requirement.

⁴ See General Education Requirements.

⁵ MATH 1190 or MATH 4190 may be substituted.

⁶ Select from: COMM 1500, COMM 2500, HON 2230; or the cluster of courses AS 3090, AS 3100, AS 4090, AS 4100; or ML 1010, ML 1020.

⁷ MATH 3020 or STAT 3300 may be substituted.

⁸ Select from ENGL 3040, ENGL 3120, ENGL 3140, ENGL 3150, ENGL 3330

⁹ Select from 3000-level or higher CPSC courses. No more than three credits of CPSC 3990 or CPSC 4810 may be applied to this requirement, and no more than six credits of CPSC 4820 may be applied. Up to three credits of ECE 3000-level or higher courses; or MATH 3650; or MATH 4000-level courses may be substituted (except MATH 4190). Courses selected to satisfy this requirement may not also be used to satisfy other major requirements.

¹⁰ Select from ECON 2000, ECON 2110 or ECON 2120. The course selected to satisfy this requirement may not also be used to satisfy the General Education Social Science Requirement.

¹¹ Select from FIN 3060, MGT 3900, MGT 4000

¹² Select from MGT 4520, MGT 4540, MGT 4550, MGT 4560, or any 4000-level CPSC course. CPSC 4810 may not be substituted. Courses selected to satisfy this requirement may not also be used to satisfy other major requirements.

Notes:

1. For graduation, a candidate for the BS degree in Computer Information Systems must have earned a grade of C or better in each CPSC course applied to the non-elective requirements of the degree.
2. A grade of C or better must be earned in all prerequisite courses (including CPSC and MATH courses) before enrolling in the next CPSC course.
3. General Education Cross-Cultural Awareness and Science and Technology in Society requirements must be satisfied.
4. Students in the BS in Computer Information Systems major may not minor in Computer Science.

Notes: