Computer Information Systems must have a cumulative grade-point average of 2.0 or better.

Additional information can be found at http://www.clemson.edu.computing.

### Course Requirements

#### First Semester
- **ENGR 1070**, **1080** and **1090** may be substituted for **ENGR 1410**

#### Second Semester
- **ECE 4960 Integrated System Design II**
- **3- Arts and Humanities Requirement**
- **3- Social Science Requirement**

#### Sophomore Year
- **CPSC 2070 Discrete Structures for Computing**
- **CPSC 2120 Algorithms and Data Structures**
- **3- Arts and Humanities (Literature) Requirement**
- **3- Oral Communication Requirement**
- **3- Social Science Requirement**

#### Junior Year
- **ACCT 2020 Managerial Accounting Concepts**
- **CPSC 2200 Microcomputer Applications**
- **CPSC 3220 Introduction to Operating Systems**
- **CPSC 3720 Intro to Software Engineering**
- **Writing Requirement**

#### Senior Year
- **CPSC 4200 Computer Security Principles or**
- **CPSC 4240 System Admin. and Security**
- **CPSC 4620 Database Management Systems**
- **CPSC 4910 Seminar in Professional Issues II**
- **Business Requirement**
- **Computer Science Requirement**
- **Economics Requirement**

#### Freshman Year
- **CPSC 1110**
- **MATH 1070 Business Calculus I or**
- **MATH 1080 Calculus of One Variable I**
- **Introduction to Computing Requirement**
- **Natural Science Requirement**
- **Elective**

#### Second Semester
- **MATH 2070 Business Calculus II or**
- **MATH 1080 Calculus of One Variable II**
- **Arts and Humanities (Non-Lit.) Requirement**
- **Introduction to Computing Requirement**
- **Natural Science Requirement**
- **Social Science Requirement**
- **Elective**

#### Sophomore Year
- **CPSC 2070 Discrete Structures for Computing**
- **CPSC 2120 Algorithms and Data Structures**
- **Arts and Humanities (Literature) Requirement**
- **Oral Communication Requirement**
- **Social Science Requirement**

#### Junior Year
- **ACCT 2020 Managerial Accounting Concepts**
- **CPSC 2200 Microcomputer Applications**
- **CPSC 3220 Introduction to Operating Systems**
- **CPSC 3720 Intro to Software Engineering**
- **Writing Requirement**

#### Senior Year
- **CPSC 4200 Computer Security Principles or**
- **CPSC 4240 System Admin. and Security**
- **CPSC 4620 Database Management Systems**
- **CPSC 4910 Seminar in Professional Issues II**
- **Business Requirement**
- **Computer Science Requirement**
- **Information Systems Requirement**

### Notes
1. A student is allowed to enroll in ECE courses (excluding ECE 2070, 2080, 2090) only when all prerequisites have been passed with a grade of C or better.
2. All Computer Engineering students must have a cumulative engineering grade-point average of 2.0 to enroll in any 3000- or 4000-level ECE courses.
3. A student may exceed a maximum of two attempts, excluding a W, to complete successfully any ECE course.

### COMPUTER INFORMATION SYSTEMS

#### Bachelor of Science

The Bachelor of Science 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 can be found at http://www.clemson.edu/computing.

### COMPUTER SCIENCE

#### Bachelor of Arts

The Bachelor of Arts in Computer Science is ideal for students interested in acquiring a broad-based liberal arts education that includes a strong and solid understanding of computer science. The curriculum is oriented toward design, implementation, and application of computer software systems to solve information processing problems. The program prepares students for employment in the computer software field or for continued study toward an advanced degree in computer science. Additional information can be found at http://www.clemson.edu/computing.

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

#### Freshman Year
- **ENGL 1030 Composition and Rhetoric**
- **MATH 1070 Business Calculus I or**
- **MATH 1060 Calculus of One Variable I**
- **Modern Language Requirement**
- **Introduction to Computing Requirement**
- **Elective**

#### Second Semester
- **MGT 3120 Decision Models for Management**
- **MKT 3010 Principles of Marketing**
- **Computer Science Requirement**
- **Information Systems Requirement**

#### Senior Year
- **Select either the MATH 1020/2070, 1060/1070 or 1060/1080 sequence. Students who select the 1060/1080 sequence will have satisfied the two elective credits in the freshman year.**
- **Select either the CPSC 1010 and 1020 sequence; or the CPSC 1060 and 1070 sequence. The sequence of CPSC 1110 and 1020 is also acceptable with one elective credit taken in the first semester.**
- **Select from courses in BIOI, BCHM, CH, GEOL, MICR, PHYS; or ENSP 2000. At least one course must include a laboratory and satisfy the Natural Science General Education Requirement.**
- **See General Education Requirements.**
- **MATH 1100 may be substituted.**
- **Select from: COMM 1500, 2500, HCOM 2230, or the cluster of courses AS 3090, 3100, 4090, 4000; or ML 1010, 1020.**
- **MATH 3020 or STAT 3510 may be substituted.**
- **Select from: ENGL 3040, 3120, 3140, 3330, AS 3090, 3100, 4090, 4000; ML 3030, 3120, 4000.**
- **Select from 3000-level or higher CPSC courses or DPA 3070. No more than three credits of CPSC 3990 or 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.**
- **Select from ECON 2000, 2110, or 2120.**
- **Select from FIN 3060 and MGT 3900, 4000.**
- **Select from MGT 4520, 4540, 4550, 4560, or any 4000-level CPSC course. CPSC 4810 may not substitute.**

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.