Department of Computer Science and Engineering

## BS CIS Requirements

Required Math and Science

| ArtsSci 1100 | Arts and Sciences Survey | Hours |
| :--- | :--- | :---: |
| Math 1151 | Calculus I | 1 |
| Math 1152 | Calculus II | 5 |
| Math 3345 | Foundations of Higher Mathematics | 5 |
| Physics 1250 | Mechanics, Thermal Physics, Waves | 3 |

Major Program (minimum grade of C- required in each course and minimum 2.0 GPA overall)
Core Requirements

| CSE 2221 | Software I: Software Components | 4 |
| :--- | :--- | :---: |
| CSE 2231 | Software II: Software Development and Design | 4 |
| CSE 2321 | Foundations I: Discrete Structures | 3 |
| CSE 2331 | Foundations II: Data Structures and Algorithms | 3 |
| CSE 2421 | Systems I: Introduction to Low-Level Programming and Computer Organization | 4 |
| CSE 2431 | Systems II: Introduction to Operating Systems | 3 |
| ECE 2060 | Introduction to Digital Logic | 3 |
| Stat 3470 | Introduction to Probability and Statistics for Engineers | 3 |
| CSE 3231 or CSE 3241 | Software Engineering Techniques or Introduction to Database Systems | 3 |
| CSE 3341 | Principles of Programming Languages | 3 |
| CSE 3421 or CSE 3461 | Introduction to Computer Architecture or Computer Networking and Internet Technologies | 3 |
|  | Survey of Artificial Intelligence I: Basic Techniques or Computer Game and Animation <br> Techniques | 3 |

Choose one of the following:

| CSE 2501 | Social, Ethical, and Professional Issues in Computing | 1 |
| :--- | :--- | :---: |
| Philos 1338 | Ethics in the Professions: Introduction to Computing Ethics and Effective Presentation | 4 |

Choose one of the following:

| CSE 3901 | Project: Design, Development, and Documentation of Web Applications | 4 |
| :--- | :--- | :---: |
| CSE 3902 | Project: Design, Development, and Documentation of Interactive Systems | 4 |
| CSE 3903 | Project: Design, Development, and Documentation of System Software | 4 |

Choose one of the following:

| CSE 5911 | Capstone Design: Software Applications | 4 |
| :--- | :--- | :---: |
| CSE 5912 | Capstone Design: Game Design and Development | 4 |
| CSE 5913 | Capstone Design: Computer Animation | 4 |
| CSE 5914 | Capstone Design: Knowledge-Based Systems | 4 |
| CSE 5915 | Capstone Design: Information Systems | 4 |

CSE Technical Electives (choose at least 16 hours that meet the following criteria)
Any CSE course 3000-level or above not already used to fulfill another requirement
At most 1 hour of CSE 4251-4255
At most 2 hours of CSE 4193, 4193H, 4998, 4998H, 4999 or 4999H
At most 7 hours of non-CSE courses at the 2000-level and above approved by the academic advisor

Department of Computer Science and Engineering

BS CIS Sample Schedule

|  | Autumn |  | Spring |  |
| :---: | :---: | :---: | :---: | :---: |
|  | ArtsSci 1100 | 1 | CSE 2221 | 4 |
|  | Math 1151 | 5 | Math 1152 | 5 |
|  | GE | 3 | English 1110 | 3 |
| Year 1 | GE | 3 | Physics 1250 | 5 |
|  | CSE 1223 | 3 |  |  |
|  |  | 15 |  | 17 |
|  | CSE 2231 | 4 | CSE 2331 | 3 |
|  | CSE 2321 | 3 | CSE 2421 | 4 |
|  | Stat 3470 | 3 | ECE 2060 | 3 |
| Year 2 | GE (Foreign Language) | 4 | Math 3345 | 3 |
|  | GE | 3 | GE (Foreign Language) | 4 |
|  |  | 17 |  | 17 |
|  | CSE 2431 | 3 | CSE 32X1 | 3 |
|  | CSE 2501 | 1 | CSE 34X1 | 3 |
|  | CSE 390X | 4 | CSE 35X1 | 3 |
| Year 3 | GE (Foreign Language) | 4 | GE (Science) | 4-5 |
|  | GE | 3 | GE | 3 |
|  |  |  | Technical Elective | 1 |
|  |  | 14-18 |  | 17-18 |
|  | CSE 3341 | 3 | CSE 591X | 4 |
|  | Technical Elective | 3 | Technical Elective | 3 |
|  | Technical Elective | 3 | Technical Elective | 3 |
| Year 4 | Technical Elective | 3 | GE | 3 |
|  | GE (Science) | 4-5 | GE | 3 |
|  |  | 16-17 |  | 16 |

- An application to the major must be submitted online at
https://advising.engineering.osu.edu/currentstudents/applying-your-major during the term in which admission requirements are being completed
- Visit https://cse.osu.edu/cis-application-major-and-requirements-apply for application requirements and the application link

Note: Majors must select a specialization option. Requirements for the specialization options may dictate core and technical elective choices.

