Elgin Community College and Aurora University
Associate in Science Degree and Bachelor of Science Degree
Computer Science Major

First and Second Year at Elgin Community College

Semester 1 at ECC	AU Equivalent	Semester 2 at ECC	AU Equivalent
CIS 121 Computer Science I (4) **MTH 112** College Algebra (4) **ENG 101** English Composition I (3) **Physical Science** Gen Ed (3-4)	**CSC 1700** Introduction to Computer Programming (4) **MTH 1100** College Algebra (4) **ENG 1000** Intro to Academic Writing (4) **Elective** or **Gen Ed Req.**	**CIS 223** Computer Science II (4) **MTH 120** Statistics I (4) **ENG 102** English Composition II (3) **Life Science Gen Ed- BIO 108** Biology for Contemporary Society (4) recommended	**CSC 2XXX** Computer Science Elective (4) **MTH 2320** General Statistics (4) **ENG** Elective **BIO 1210** Biology of Cells (4)
Semester 3 at ECC	AU Equivalent	Semester 4 at ECC	AU Equivalent
CIS 226 Computer Science III (4) **CIS 127** Discrete Structures (3) **CMS 101** Fundamentals of Speech (3) **Fine Arts** Gen Ed (3)	**CSC 2150** Data Structures & Algorithms (4) **MTH 3270** Discrete Mathematics (4) **COM 1XXX** Communications Elective **Elective** or **Gen Ed Req.**	**CIS 227** Computer Organization (3) **Humanities** Gen Ed (3) **Social Science** Gen Ed (3) **Behavioral Science** Gen Ed (3) **Electives** to reach minimum of 60 credits	**CSC 2300** Computer Architecture (4) **Elective** or **Gen Ed Req.** **Elective** or **Gen Ed Req.** **Elective** or **Gen Ed Req.**

Third and Fourth Year at Aurora University
Students complete coursework for either the Information Technology or Software Engineering track for the Computer Science major.

Computer Science BS: Information Technology Track

Semester 5 at Aurora University (12.5 hours)	Semester 6 at Aurora University (16.5 hours)
IDS 3500 Junior Mentoring (.5) **CSC 2200** Web Application Development (4) **Electives*** (8)	**IDS 3550** Junior Mentoring (.5) **CSC 3350** Networks and Security (4) **CSC 2450** Operating Systems Administration (4) **Electives*** (8)
Semester 7 at Aurora University (16 hours)	Semester 8 at Aurora University (16 hours)
CYB 4610 Ethical Hacking OR ----------------------> **CSC 3400** Computer Security **CSC 4500** Database Design and Implementation **Electives*** (4-8 hours)	**CSC 4620** Computer Forensics (4) **CSC 4990** Computer Science and Engineering Capstone (4) **Electives*** (4-8 hours)

Computer Science BS: Software Engineering Track

Semester 5 at Aurora University (12.5 hours)	Semester 6 at Aurora University (16.5 hours)
IDS 3500 Junior Mentoring (.5) **CSC 2200** Web Application Development (4) **CSC 3250** Object-oriented Soft. Des. & Dev. (4) **Electives*** (4)	**IDS 3550** Junior Mentoring (.5) **CSC 3510** Software Test., Ver., Val. & QA (4) **CSC 3700** Advanced Web App Development (4) **Electives*** (8)
Semester 7 at Aurora University (16 hours)	Semester 8 at Aurora University (16 hours)
CSC 4400 Programming Languages (4) **CSC 4500** Database Design and Implementation (4) **Electives*** (8)	**CSC 4990** Computer Science and Engineering Capstone (4) **Electives*** (12)

 *Electives may be used to fulfill any general education deficiencies. A minimum of 30 hours must be 3000 level or higher of which a minimum of 15 must be within the major. A grade of C or higher is required in all general education and major coursework.
Total hours must equal 120 or higher with a minimum cumulative GPA of 2.0/4.0.