

**Waubonsee Community College and Aurora University**

Associate in Science Degree and Bachelor of Science Degree  
Computer Science Major

**First and Second Year at Waubonsee Community College**

Semester 1 at WCC	AU Equivalent	Semester 2 at WCC	AU Equivalent
<b>ENG 101</b> First-Year Composition (3)  <b>MTH 107</b> Basic Statistics (3)  <b>IAI Social/Behavioral Science*</b> (3)  <b>BIO 100</b> Intro to Biology or <b>BIO 110</b> Environmental Biology (3)  <b>CIS 115</b> Introduction to Programming (3)	<b>ENG 1000</b> Intro to Academic Writing <b>MTH 2320</b> General Statistics  Elective or <b>Gen Ed Req.</b>  <b>BIO</b> elective OR <b>BIO 2200</b> Humans and the Environment  <b>CSC 1XXX</b> Elective	<b>ENG 102</b> First-Year Composition II (3)  <b>CHM 121</b> General Chemistry (4) OR <b>PHY 221</b> General Physics (5)  Major/elective course (3)  <b>MTH XXX</b> Math Elective (3-4)  <b>IAI Fine Arts*</b> (3)	<b>ENG</b> Elective  <b>CHM 1310/Z</b> General Chemistry I OR <b>PHY 2210/Z</b> General Phy I  Elective or <b>Gen Ed Req.</b>  <b>MTH XXXX</b> Math Elective  Elective or <b>Gen Ed Req.</b>
Semester 3 at WCC	AU Equivalent	Semester 4 at WCC	AU Equivalent
Major/elective course (3)  <b>COM 100</b> Fundamentals of Speech (3)  Physical or Life Sciences (3)  <b>IAI Social/Behavioral Science*</b> (3)  <b>CIS 130</b> CS 1: C++ Programming OR <b>CIS 150</b> CS 1: Java Programming (3)	Elective or <b>Gen Ed Req.</b>  <b>COM 1XXX</b> Communications Elective  Physical or Life Sciences XXXX  Elective or <b>Gen Ed Req.</b>  <b>CSC 1700</b> Introduction to Computer Programming	<b>IAI Humanities*</b> (3)  Major/elective course (3)  Major/elective course (3)  Major/elective course (3)  <b>CIS 230</b> Computer Science II: C++ Programming OR <b>CIS 250</b> Computer Science II: Java Programming (3)	Elective or <b>Gen Ed Req.</b>  Elective or <b>Gen Ed Req.</b>  Elective or <b>Gen Ed Req.</b>  <b>CSC 2150</b> Data Structures & Algorithms

\* One course must have a non-Western or diversity emphasis. This is not an additional credit hour requirement.

**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)
<b>IDS 3500</b> Junior Mentoring (.5) <b>CSC 2200</b> Web Application Development (4) <b>CSC 2300</b> Computer Architecture (4) Electives* (4)	<b>IDS 3550</b> Junior Mentoring (.5) <b>CSC 2450</b> Operating Systems Administration (4) <b>CSC 3350</b> Networks and Security (4) <b>MTH 3270</b> Discrete Mathematics (4) Electives* (4)
Semester 7 at Aurora University (16 hours)	Semester 8 at Aurora University (16 hours)
<b>CYB 4620</b> Digital Forensics (4) <----- OR -----> <b>CSC 3400</b> Computer Security (4) <b>CSC 4500</b> Database Design and Implementation (4) Electives* (4-8 hours)	<b>CYB 4610</b> Ethical Hacking (4) <b>CSC 4990</b> 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)
<b>IDS 3500</b> Junior Mentoring (.5) <b>CSC 2200</b> Web Application Development (4) <b>CSC 3250</b> Object-oriented Soft. Des. & Dev. (4) Electives* (4)	<b>IDS 3550</b> Junior Mentoring (.5) <b>CSC 2300</b> Computer Architecture (4) <b>CSC 3510</b> Software Testing, Ver., Val. & QA (4) <b>MTH 3270</b> Discrete Mathematics (4) Electives* (4)
Semester 7 at Aurora University (16 hours)	Semester 8 at Aurora University (16 hours)
<b>CSC 3700</b> Advanced Web App Development (4) <b>CSC 4500</b> Database Design and Implementation (4) Electives* (8)	<b>CSC 4990</b> Computer Science and Engineering Capstone (4) <b>CSC 4400</b> Programming Languages (4) Electives* (8)

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