

# COMPUTER SCIENCE - ASSOCIATE OF SCIENCE DEGREE (AS)

## Degree Plan

Explore More About This Program: <https://cwi.edu/program/computer-science>

*The course sequence listed below is strongly recommended in order to complete your program requirements. Please register for each semester as shown using the Student Planning tool in myCWI. Plans may be modified to fit the needs of part-time students by adding additional semesters. Consult your advisor for any questions regarding this course sequence plan.*

### First Year

Fall		Credit Hours
CWI 101	Connecting With Ideas	3
ENGL 101	Writing and Rhetoric I (GEM 1)	3
MATH 147 or MATH 170	Precalculus (GEM 3) <sup>1,2</sup> or Calculus I	5
GEM 4 - Scientific Ways of Knowing course <sup>3</sup>		3
<b>Total Semester Credit Hours</b>		<b>14</b>

### Spring

COMM 101 or COMM 112	Fundamentals of Oral Communication (GEM 2) or Argumentation and Debate	3
ENGL 102	Writing and Rhetoric II (GEM 1)	3
MATH 170	Calculus I <sup>2</sup>	5
GEM 5 - Humanistic & Artistic Ways of Knowing course		3
GEM 6 - Social & Behavioral Ways of Knowing course		3
<b>Total Semester Credit Hours</b>		<b>17</b>

### Second Year

Fall		Credit Hours
CPSC 121	Computer Science I <sup>4</sup>	4
CPSC 153	Navigating Computer Systems	1
CPSC 155	Introduction to Version Control	1
PHYS 211	Physics for Scientists and Engineers I (GEM 4)	4
PHYS 211L	Physics for Scientists and Engineers I Lab (GEM 4)	1
GEM 5 - Humanistic & Artistic Ways of Knowing course <sup>3</sup>		3
<b>Total Semester Credit Hours</b>		<b>14</b>

### Spring

CPSC 208	Introduction to Full Stack Web Development	3
CPSC 221	Computer Science II <sup>4</sup>	3
GEM 6 - Social & Behavioral Ways of Knowing course <sup>3</sup>		3
Global Perspectives course		3
Major Electives	Select 3-4 elective credits from the list below to bring the total credits earned to at least 60 <sup>5</sup>	3-4
<b>Total Semester Credit Hours</b>		<b>15</b>

**Minimum Credit Hours Required** **60**

**\*Students must select an "E" designated (Ethical Reasoning) course to fulfill one of their General Education requirements.\***

<sup>1</sup> In order to graduate, Computer Science majors are required to complete MATH 170 Calculus I. If students do not have high enough ACT, SAT, or CWI Math Diagnostic exam scores to place directly into MATH 170, they will need to complete MATH 147 Precalculus in their first semester to fulfill their GEM 3 requirement and the prerequisite requirement for MATH 170.

<sup>2</sup>

If students completed MATH 170 Calculus I to fulfill their GEM 3 requirement, they should complete 3-4 credits of coursework from the Major Electives course list during their second semester instead.

<sup>3</sup> Course must come from a different discipline.

<sup>4</sup> Includes an integrated lab component.

<sup>5</sup> Students should work with their intended transfer institution to determine the most beneficial elective course(s) from the Major Electives list below.

## Computer Science: Major Electives

Course	Course Title	Min Credits
CHEM 101	Introduction to Chemistry	3
CHEM 101L	Introduction to Chemistry Lab	1
CHEM 111	General Chemistry I	3
CHEM 111L	General Chemistry I Lab	1
CPSC 111	Introduction to Python Programming	3
ENGL 202	Technical Communication	3
MATH 175	Calculus II	4
MATH 176	Discrete Mathematics	4
MATH 230	Introduction to Linear Algebra	3
MATH 275	Calculus III	4
MATH 285	Differential Equations with Matrix Theory	4
PHYS 212	Physics for Scientists and Engineers II	4
PHYS 212L	Physics for Scientists and Engineers II Lab	1