

## BS in Computer Science – Sample Study Plan

### Year 1 – Term 1 (Fall)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 101	Introduction to Programming	6
Compulsory (MATH/STAT)	MATH 100	Calculus and Analytic Geometry III	6
Compulsory (Gen Ed)	ENGL 100	Academic English	6
Gen Ed Elective		General Education Elective	6
Gen Ed Elective		General Education Elective	6

### Year 1 – Term 2 (Spring)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 111	Discrete Structures	6
Compulsory	CMPS 102	Intermediate Programming with Data Structures	6
Compulsory (MATH/STAT)	MATH 201	Elementary Linear Algebra with Applications	6
Compulsory (Gen Ed)	ENGL 101	Advanced Academic English	6
Gen Ed Elective		General Education Elective	6

### Year 2 – Term 3 (Fall)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 214	Algorithms and Data Structures	6
Compulsory	CMPS 221	Computer Organization and Design	6
Compulsory (MATH/STAT)	STAT 101	Introduction to Probability and Random Variables	6
Gen Ed Elective		General Education Elective	6
Gen Ed Elective		General Education Elective	6

### Year 2 – Term 4 (Spring)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 342	Computer Networks	6
Compulsory	CMPS 244	Database Systems	6
Compulsory	CMPS 340	Operating Systems	6
Compulsory	CMPS 270	Software Construction	6
Gen Ed Elective		General Education Elective	6

### Year 3 – Term 5 (Fall)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 271	Software Engineering	6
Compulsory	CMPS 231	Programming Languages	6
CMPS Elective	CMPS 378	Web Programming and Design	6
Gen Ed Elective		General Education Elective	6
Gen Ed Elective		General Education Elective	6

### Year 3 – Term 6 (Spring)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 315	Theory of Computation	6
CMPS Elective	CMPS 362	Data Science	6
CMPS Elective	CMPS 446	Distributed Systems	6
Gen Ed Elective		General Education Elective	6
Gen Ed Elective		General Education Elective	6

### Year 4 – Term 7 (Fall)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 361	Machine Learning	6
CMPS Elective	CMPS 382	Game Programming	6
CMPS Elective	CMPS 485	Computer Graphics	6
General/Technical Elective	CMPS 375	Mobile Application Development	6
Gen Ed Elective		General Education Elective	6

### Year 4 – Term 8 (Spring)

Course Type	Course Code	Course Title	ECTS
Compulsory	CMPS 490	Internship	6
CMPS Elective	CMPS 243	Computer and Information Security	6
CMPS Elective	CMPS 447	Advanced Networking Topics	6
Gen Ed Elective		General Education Elective	6
Gen Ed Elective		General Education Elective	6