

B.S. in Computer Science Curriculum 2014-2015 Academic Year

Computer Science Bachelor of Science

Freshman Year

First Semester

4 – CPSC 1010 Computer Science I
3 – ENGL 1030 Accelerated Composition
4 – MATH 1060 Calculus of One Variable I
4 – Natural Science Requirement¹

15

Second Semester

4 – CPSC 1020 Computer Science II
4 – MATH 1080 Calculus of One Variable II
3 – Arts and Humanities (Non-Lit) Requirement²
4 – Natural Science Requirement¹

15

Sophomore Year

First Semester

3 – CPSC 2070 Discrete Structures for Computing
4 – CPSC 2120 Algorithms and Data Structures
3 – Arts and Humanities (Literature) Requirement²
3 – Natural Science Requirement¹
3 – Oral Communications Requirement³

16

Second Semester

3 – CPSC 2150 Software Development Foundations
4 – CPSC 2310 Intro. to Computer Organization
1 – CPSC 2910 Seminar in Professional Issues I
3 – STAT 3090 Introductory Business Statistics⁴
3 – Natural Science Requirement¹
2 – Elective

16

Junior Year

First Semester

3 – CPSC 3300 Computer Systems Organization
3 – CPSC 3600 Networks and Network Programming
3 – CPSC 3720 Intro. to Software Engineering
3 – MATH 3110 Linear Algebra
3 – Social Science Requirement²

15

Second Semester

3 – CPSC 3220 Intro. to Operating Systems
3 – CPSC 3500 Foundations of Computer Science
3 – CPSC 3620 Distributed and Cluster Computing
3 – Arts and Humanities Requirement⁵ *or*
3 – Social Science Requirement⁵
3 – Social Science Requirement²

15

Senior Year

First Semester

3 – CPSC 3520 Programming Languages
6 – Computer Science Requirement⁷
3 – Writing Requirement⁶
3 – Elective

15

Second Semester

3 – CPSC 4910 Seminar in Professional Issues II
3 – Arts and Humanities Requirement⁵ *or*
3 – Social Science Requirement⁵
6 – Computer Science Requirement⁷
3 – Elective

15

122 Total Semester Hours

¹Two-semester sequence in the same physical or biological science, each including a laboratory is required. Select from BIOL 1030/1050, 1040/1060; 1100, 1110; CH 1010, 1020; GEOL 1010/1030 and 1020 or 1120/1140; PHYS 1220/1240, 2210/2230. The six remaining hours may be selected from BIOL, BCHM, CH, GEOL, MICR, PHYS; or ENSP 2000.

²See General Education Requirements.

³Select from: COMM 1500, 2500, HONS 2230; or the cluster of courses AS 3090, 3100, 4090, 4100; or ML 1010, 1020.

⁴MATH 2060 and 3020, or STAT 2300 and 3300 may be substituted.

⁵Select from courses in AAH, ANTH, ART, CHIN, COMM, DANC, EAS, ECON, ENGL, FR, GEOG, GER, HIST, HUM, ITAL, JAPN, MUSC, PA, PAS, PHIL, POSC, PSYC, REL, RUSS, SOC, SPAN, THEA, WS.

⁶One course of: ENGL 3040, 3120, 3140, 3150, 3160, 3330; AS 3090, 3100, 4090, 4100; ML 3010, 3020, 4010, 4020.

⁷Select from 3000-level or higher CPSC courses. No more than three credits of CPSC 3990 or 4810 may be applied to this requirement, and no more than six credits of CPSC 4820 may be applied. Up to three credits of approved 3000-level or higher MATH or ECE courses may be substituted.

Notes:

- For graduation, a candidate for the BS degree in Computer Science must have earned a grade of C or better in each CPSC course applied to the non-elective requirements of the degree.
- A grade of C or better must be earned in all prerequisite courses (including CPSC and MATH courses) before enrolling in the next CPSC course.
- General Education Cross-Cultural Awareness and Science and Technology in Society requirements must be satisfied.