

B.S. in Computer Science Curriculum

2005/2006-2006/2007 Academic Years

Computer Science Bachelor of Science

Freshman Year

First Semester

4 – CP SC 101 Computer Science I
3 – ENGL 103 Accelerated Composition
4 – MTHSC 106 Calculus of One Variable I
3 – Social Science Requirement^{1,2}

14

Second Semester

4 – CP SC 102 Computer Science II
4 – MTHSC 108 Calculus of One Variable II
3 – MTHSC 119 Introduction to Discrete Methods
3 – Arts and Humanities (Non-Lit) Requirement^{1,2}
3 – Social Science Requirement^{1,2}

17

Sophomore Year

First Semester

4 – CP SC 212 Algorithms and Data Structures
3 – PHYS 122 Physics with Calculus I
3 – Arts and Humanities Requirement^{2,3} *or*
3 – Social Science Requirement^{2,3}
3 – Arts and Humanities (Literature) Requirement¹
3 – Oral Communications Requirement¹

16

Second Semester

3 – CP SC 215 Tools/Tech. For Software Development
4 – CP SC 231 Intro. To Machine Organization
1 – CP SC 291 Seminar in Professional Issues I
3 – MTHSC 301 Statistical Methods I, *or*
3 – MTHSC 302 Stats. For Science and Engr.
3 – PHYS 221 Physics with Calculus II

14

Junior Year

First Semester

3 – CP SC 330 Computer Systems Organization
3 – CP SC 360 Networks & Network Programming
3 – CP SC 372 Intro. Software Development
3 – MTHSC 311 Linear Algebra
4 – Natural Science Requirement⁴

16

Second Semester

3 – CP SC 322 Intro. to Operating Systems
3 – CP SC 350 Foundations of Computer Science
3 – CP SC 362 Distributed Prog. & Cluster Computing
3 – Emphasis Area⁵
4 – Natural Science Requirement⁴

16

Senior Year

First Semester

3 – CP SC 428 Design and Implementation of
Programming Languages
3 – Advanced Writing Requirement¹
3 – Computer Science Requirement⁶
3 – Emphasis Area⁵
3 – Elective

15

Second Semester

1 – CP SC 491 Seminar in Prof. Issues II⁷
3 – Arts and Humanities Requirement^{2,3} *or*
3 – Social Science Requirement^{2,3}
3 – Computer Science Requirement⁶
3 – Emphasis Area⁵
4 – Elective

14

122 Total Semester Hours

¹Select to satisfy the University general education requirement for specified area. Social science courses must be from two different fields.

²Six of these credit hours must also satisfy General Education Cross-Cultural Awareness and Science and Technology in Society requirements.

³Selected from Art and Art History, African American Studies, Anthropology, Art, Chinese, Communication Studies, Dance, East Asian Studies, Economics, English, French, Geography, German, History, Humanities, Italian, Japanese, Music, Performing Arts, Philosophy, Political Science, Psychology, Religion, Russian, Sociology, Spanish, Theatre, Women's Studies

⁴Two semester sequence in the same physical or biological science, each including laboratory, selected from BIOL 103, 104; 110, 111; CH 101, 102; GEOL 101/103 and 102 or 112/114. Alternately if PHYS 124 and 223 are completed 6 hours may be selected from courses designated as BIOL, BIOCH, BIOSC, CH, GEOL, MICRO, PHYS; or EN SP 200.

⁵9 hours selected from any single university approved minor. At least 3 hours must be at the 300-level or above.

⁶Selected from 400-level CP SC courses, at least 3 hours must be selected from CP SC 405, 411, 429, 462 or 472.

⁷CpSc H395 may be substituted for this requirement.

Notes:

1. For graduation, a candidate for the BS degree in Computer Science must have earned a grade of C or better in each "CP SC" designated course applied to the degree.
2. A grade of C or better must be earned in all prerequisite courses (including CP SC and MTHSC courses) before enrolling in the next CP SC course.