

Sample Curriculum

FRESHMAN YEAR

<u>First Semester</u>	<u>Credit</u>
Cmp Sc 1010(1)-Intro to Computer Science ¹⁴	1
Cmp Sc 1570(53)-Intro to Programming	3
Cmp Sc 1580(54)-Intro to Programming Lab	1
English 1120(20)-Exposition and Argumentation	3
Math 1208(8)-Calculus w/Analytic Geometry I ¹⁵	5
Humanities Elective ⁵	3
	16
<u>Second Semester</u>	<u>Credit</u>
CS 1510(153)-Data Structures	3
CS 1200(128)-Discrete Mathematics	3
Math 1221(21)-Calculus w/Analytic Geometry II ¹⁵	5
Laboratory science course(s) ¹	5
	16

SOPHOMORE YEAR

<u>First Semester</u>	<u>Credit</u>
Cmp Sc 2500(253)-Algorithms	3
Social Science Elective ²	3
Literature Elective ⁵	3
Physics Elective ³	4
Sp&MS 1185(85)-Intro to Speech ⁴	3
	16
<u>Second Semester</u>	<u>Credit</u>
Cmp Sc 2300(238)-File Struct & Intro Database Sys	3
Cmp Eng 2210(111)-Intro to Cmp Eng ¹²	3
Math 3108(208)-Linear Algebra I ⁷	3
Physics Elective ³	4
Stat 3115(215)-Engineering Statistics ⁶	3
	16

JUNIOR YEAR

<u>First Semester</u>	<u>Credit</u>
History Elective ²	3
Cmp Sc 3800(284)-Intro Operating Systems	3
Cmp Eng 3150(213)-Digital Systems Design	3
Cmp Sc 2200(220)-Theory of Computer Science	3
Free Elective I ⁸	3
	15
<u>Second Semester</u>	<u>Credit</u>
Cmp Sc 3500 (256)-Programming Languages & Translators.....	3
Social Science Elective ²	3
Cmp Sc 3200 (228)-Intro to Numerical Methods.....	3
English 1160(60)-Writing and Research ¹³	3
Cmp Sc 3100(206)-Software Engineering I	3
	15

SENIOR YEAR

<u>First Semester</u>	<u>Credit</u>
Cmp Sc Electives ⁹	9
Eng/Science Electives ¹⁰	6
Cmp Sc 4096(397)-Software Systems Development I	3
	18
<u>Second Semester</u>	<u>Credit</u>
Cmp Sc Electives ⁹	6
Eng/Science Elective ¹⁰	3
Ethics Elective ¹¹	3
Free Elective ⁸	4
	16

NOTES

This sample curriculum is effective for catalog year 2014, with the most recent equivalent 3-digit course numbers shown in parentheses.

- Any science lecture-laboratory course or course pair totaling at least four hours credit. The laboratory is mandatory in all cases. These course(s) may be selected from: CHEM 1310 and CHEM 1319; CHEM 1351; BIO SCI 1113 and BIO SCI 1219; PHYSICS 1505 and PHYSICS 1509; GEOLOGY 1110 and GEOLOGY 1119; GEOLOGY 1120 and GEOLOGY 1129; BIO SCI 1223 and BIO SCI 1229; BIO SCI 2353 and BIO SCI 2359.
- Any nine credit hours of social science courses approved on the list maintained on the Computer Science web page. One course must satisfy the Missouri and U.S. Constitution requirement.
- Either PHYSICS 1125 and PHYSICS 2135 or both PHYSICS 1111- PHYSICS 1119 and PHYSICS 2111-PHYSICS 2119.
- SP&M S 1185 or SP&M S 3282
- One literature and one humanities course approved on the list maintained on the Computer Science web page.
- STAT 3113, STAT 3115, STAT 3117 or STAT 5643.
- MATH 3103 or MATH 3108
- Courses chosen from any field so that 128 hours are completed. These and only these courses may be taken pass/fail and only one course may be taken pass/fail each semester. Some courses such as algebra, trigonometry, MATH 1214, MATH 1214, MATH 1221, PHYSICS 1111, PHYSICS 1119, PHYSICS 1135, PHYSICS 2135, PHYSICS 2111, PHYSICS 2119, PHYSICS 1145, PHYSICS 2145 and the first two years of ROTC do not count toward the free electives.
- Fifteen hours of elective Comp Sci courses excluding COMP SCI 2002, COMP SCI 4700, and Comp Sci x9xx courses, At least nine hours must be 5000-level or higher. At least nine hours must be lecture courses.
- Any nine hours chosen from departments that offer a degree associated with either the Discipline Specific Curricula Committee for Science or the Discipline Specific Curricula Committee for Engineering, excluding computer science. These may not be MATH 1208, MATH 1214, MATH 1215, MATH 1221, PHYSICS 1111, PHYSICS 2229, PHYSICS 1135, PHYSICS 2135, PHYSICS 2111, PHYSICS 2119, PHYSICS 1145, or PHYSICS 2145.
- PHILOS 3225 or PHILOS 3235 or PHILOS 4340 or PHILOS 4368.
- Laboratory not required.
- Or English 3560 Technical Writing.
- Or Bio Sci 1201 CHEM 1110, PHYSICS 1101, MATH 1101, or FR ENG 1100.
- MATH 1214 may be taken instead of MATH 1208; MATH 1215 may be taken instead of MATH 1221.

Additional requirements for BS in Computer Science

A minimum of 128 credit hours is required for a Bachelor of Science degree in Computer Science and an average of at least two grade points per credit hour must be obtained. All computer science majors must earn a "C" or better grade in all COMP SCI courses used to fulfill B.S. in Computer Science degree requirements as well as in COMP ENG 2210, COMP ENG 3150, and the required ethics elective.

*Thank you for your interest in
Computer Science!*