

Undergraduate Computer Science Worksheet

BS in Computer Science - *COMPSCI-BS*

Name _____

Entry Term _____

UID _____

Transfer School(s) _____

COMPUTER SCIENCE REQUIRED COURSES (minimum 38 semester units)

Course Name	Course #	Units	Gr	Term
Computer Science I ²	CSCI 141			
Computer Science II ²	CSCI 142			
The Mechanics of Programming ²	CSCI 243			
Concepts of Computer Systems	CSCI 250			
Conc. of Par. and Dist. Systems	CSCI 251			
Analysis of Algorithms ⁷	CSCI 261			
Intro. to Comp Science Theory ⁷	CSCI 262			
Principles of Data Management	CSCI 320			
Intro. to Intelligent Systems	CSCI 331			
Programming Language Concepts	CSCI 344			
Professional Communications (WI) ¹	CSCI 471			
Intro. to Software Engineering	SWEN 261			

COMPUTER SCIENCE ELECTIVE COURSES (minimum 12 semester units)

Course Name	Course #	Units	Gr	Term
(CS Cluster Elective) ⁹				
(CS Cluster Elective) ⁹				

FREE ELECTIVES (minimum 12 semester units)

Course Name	Course #	Units	Gr	Term

YearOne

Course Name	Course #	Units	Gr	Term
YearOne ¹²	ACSC 010	0		

WELLNESS EDUCATION⁸

Course Name	Course #	Units	Gr	Term
Activity 1		0		
Activity 2		0		

CO-OP

Course Name	Course #	Units	Gr	Term
Summer co-op	CSCI 488	0		
Semester co-op	CSCI 499	0		
Semester co-op	CSCI 499	0		

GENERAL EDUCATION (Gen Ed)¹¹ (minimum 64 semester units)

Foundation	Course Name	Course #	Units	Gr	Term
1	FY Writing (WI) ¹				
Perspectives¹					
1	Artistic				
2	Ethical ³				
3	Global				
4	Social				
5	Scientific Princ. ⁶				
6	Nat'l Sci. Inquiry	Lab Science 1 ⁴			
7a	Mathematical ⁵				
7b	Mathematical ⁵				

Immersion¹

1					
2					
3					

Gen Ed Electives

1	Discrete Math for Computing	MATH 190			
2	Probability and Statistics I	MATH 251			
3	Linear Algebra	MATH 241			
4	Lab Science 2 ⁴				
5	Science Elective 1 ⁶				
6	Science Elective 2 ⁶				
7	Gen Ed Elective 1				
8	Gen Ed Elective 2				

NOTES:

- ¹ Students are required to take three writing intensive (WI) courses before they can graduate:
 - * one of the approved First Year Writing courses (URWT 150/ENGL 150/ISTE 110)
 - * one General Education course designated as WI (recommended in second or third year):

(WI course used) _____

- * one program specific course (currently CSCI 471) designated as WI (recommended in fourth or fifth year)

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BS DEGREE IN COMPUTER SCIENCE SUMMARY BY CATEGORY				
Category	Minimum Number Courses	Minimum Number Semester Units	Transferred	Taken
CS Required Courses	12	38		
CS Elective Courses	4	12		
Free Electives	4	12		
General Education	20	64		
Wellness Education	2	0		
Totals	40+2 Wellness Education Courses	126 ¹⁰		
Co-op	3 (minimum of one summer and two semesters)			

NOTES (continued):

- ² * CSCI 141 (Computer Science I) or CSCI 105 (AP Computer Science A)
* CSCI 142 (Computer Science II) or CSCI 140 (Computer Science for AP Students) or CSCI 242 (Computer Science for Transfer Students)
* Must complete prerequisite for CSCI 142 and CSCI 243 with grade of C- or higher
- ³ Students must choose from (in order of departmental preference):
 - * PHIL 306 (Professional Ethics)
 - * PHIL 102 (Intro. to Moral Issues)
 - * PHIL 202 (Foundations of Moral Philosophy)
- ^{4a} Students must complete one of the following lab science sequences:
 - * BIOL 101/103 (General Biology I Lecture/Lab) and 102/104 (General Biology II Lecture/Lab) **OR** BIOG 101/103 (Explorations in Cellular Biology and Evolution Lecture/Lab) and BIOG 102/104 (Explorations in Animal and Plant Anatomy and Physiology Lecture/Lab) (BIOL 101/103 may be paired with BIOG 102/104; BIOG 101/103 may be paired with BIOL 102/104)
 - * CHMG 141/145 (General & Analytical Chemistry I Lecture/Lab) and 142/146 (General & Analytical Chemistry II Lecture/Lab)
 - * PHYS 211 or 211A (University Physics I or University Physics IA) and 212 (University Physics II)
- ^{4b} Students who receive credit toward a lab may choose to move that credit to science electives and complete a different lab science sequence.
- ^{4c} If a student elects to complete University Physics (PHYS 211 or PHYS 211A, and PHYS 212) as as their lab science sequence:
 - * If the student has received credit both for AP Physics C: Mechanics (PHYS 206) and AP Physics C: Mechanics (PHYS 206) and AP Physics C: Electricity and Magnetism (PHYS 208), they must complete PHYS 207 (1 unit) and PHYS 209 (1 unit) to fulfill the sequence.
 - * Else if the student has received credit for AP Physics C: Mechanics (PHYS 206), they must complete PHYS 207 (1 unit) and PHYS212 to fulfill the sequence.
 - * Else if the student has received credit for AP Physics C: Electricity and Magnetism (PHYS 208), they must complete PHYS 209 (1 unit) and PHYS 211 to fulfill the sequence.
- ^{4d} Students cannot receive credit for both College Physics I and University Physics I or for both College Physics II and University Physics II.
 - * If a student receives credit for University Physics I (PHYS 211 or PHYS 211A or PHYS 206/207), any credit received for College Physics I (PHYS 111) is forfeit.
 - * If a student receives credit for University Physics II (PHYS 212 or PHYS 208/209), any credit received for College Physics II (PHYS 112) is forfeit.
- ⁵ Students are required to complete a calculus sequence and will be placed in a calculus sequence based on their score on the Math Placement Exam. The standard calculus sequence is MATH 181 and 182 (Project Based Calculus I & II). Some students may be required to complete MATH 181A and 182A (Calculus I & II), or MATH 171, 172, and 173 (Calculus A, B, & C) as alternatives. All three sequences will fulfill Gen Ed Perspectives 7a and 7b. Some students may be required to take one or more courses (such as MATH 090 (Algebra), MATH 101 (College Algebra), and/or MATH 111 (Precalculus)) prior to starting a calculus sequence. Credits from these additional courses are not counted anywhere on the CS worksheet. Students who must take some other sequence of calculus courses should consult with their academic advisor regarding placement and/or credit.
- ⁶ Valid science electives **may only be chosen** from courses offered by the College of Science (a few courses are excluded - see your academic advisor). If a student takes a valid science elective that also counts under the Scientific Principles Perspective then that student may substitute a Gen Ed Elective for Science Elective 2. In addition to choosing valid science electives as defined by Computer Science, make sure the selected courses are specifically approved for General Education credit (some courses offered through the College of Science are not approved for General Education credit).
- ⁷ Students in the Honors Program may select CSCI 263 (Honors Intro. to CS Theory) in place of CSCI 262 and CSCI 264 (Honors Analysis of Algorithms) in place of CSCI 261.
- ⁸ Students must successfully complete **two different** wellness activity courses. Different levels and/or forms of a course that may have the same course number are considered different wellness activity courses.
- ⁹ See the current CS Undergraduate Handbook online at www.cs.rit.edu for information about CS clusters and associated courses.
- ¹⁰ Most courses (other than YearOne or Wellness Education) taught under semesters are 3 (semester) units each. CSCI 141, 142; MATH 181, 181A, 182, 182A; PHYS 211, 211A, 212; CHMG 141/145, 142/146; BIOL 101/103, 102/104; BIOG 101/103, 102/104 are all 4 (semester) unit offerings.
- ¹¹ The specifics of which courses fulfill which specific General Education requirements (for example, individual Perspectives) may change over time. Existing Immersions may be modified and new Immersions may be created. **Only courses** from Liberal Arts, Science, or other colleges that are **specifically approved for General Education credit may fulfill General Education requirements**. Students should consult with their academic advisor often to confirm their understanding of how individual courses apply in their case.
- ¹² Students in the Honors program take an honors seminar which integrates the YearOne curriculum into a course that carries 3 (semester) units.

ADDITIONAL NOTES:

Date By

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