

**AS Degree, Computer Science PSU for Catalog 2018-2019**
**AS Degree, Computer Science PSU- FIRST YEAR**

<b>FALL TERM</b>		<b>CREDITS</b>	<b>PREREQUISITIES</b>	<b>QUARTER</b>
BI-211 or CH-221 or PH-211	General Biology for Science Majors (Cellular Biology) General Chemistry Physics with Calculus	5	BI-211: Recommended MTH-111 or placement in MTH-112; WRD-090 or placement in RD-115; WRD-098 or placement in WR-121. Corequisite: Current enroll. in or completion of CH-104 or CH-221  CH-221: Prerequisites: A year of high school chemistry or CH-150, or CH-104 and CH-105; MTH-095 with a C or better, or placement in MTH-105 or MTH-111  PH-211: Prerequisites: MTH-251 with a C or better or placement in MTH-252 and WRD-090 with a C or better or placement in RD-115, or placement in WR-121. Recommended: MTH-254	BI-211 (Fall) or CH-221 (Fall/Winter) or PH-211 (Fall)
CS-161	Computer Science I	4	Prerequisites: MTH-111 or placement in MTH-112, or 4 years high school math	Fall/Winter
MTH-251	Calculus I	5	Prerequisite: MTH-112 with a C or better or placement in MTH-251. Recommended: WRD-098 or placement in WR-121	Fall/Win/Spr/Sum
<b>WINTER TERM</b>				
BI-212 or CH-222 or PH-212	General Biology for Science Majors (Animal Biology) or General Chemistry or Physics with Calculus	5	BI-212: Corequisite: CH-105 or CH-222  CH-222: Prerequisite: CH-221  PH 212: Prerequisites: PH-211 and MTH-252. Recommended: MTH-254	BI-212 (Winter) or CH-222 (Winter/Spring) or PH-212 (Winter)
CS-162	Computer Science II	4	Prerequisite: CS-161	Winter/Spring
MTH-252	Calculus II	5	Prerequisite: MTH-251 with a C or better. Recommended: WRD-098 or placement in WR-121	Fall/Win/Spr/Sum
<b>SPRING TERM</b>				
BI-213 or CH-223 or PH-213	General Biology for Science Majors (Plant Biology & Ecology) or General Chemistry or Physics with Calculus	5	BI 213: Prerequisite or Corequisite: CH-105 or CH-222  CH-105 or CH-223. CH 223 Prerequisite: CH-222  PH 213: Prerequisite: PH-212	BI-213 (Spring) or CH-223 (Spring/Summer) or PH-213 (Spring)
CS-260	Data Structures	4	Prerequisite: CS-162	Spring
MTH-253 or MTH-261	Calculus III or Linear Algebra	5	Prerequisite: MTH-252 with a C or better; Recommended: WRD-098 or placement in WR-121	MTH-253: Fall/Win/Spr MTH-261: Fall/Spring/Summer
Choose Arts & Letters or Soc. Science electives	Arts & Letters or Social Science electives	3-4		
<b>SUMMER TERM</b>				
COMM-111	Public Speaking	4	Prerequisites: WRD-090 or placement in RD-115; WRD-098 or placement in WR-121	Fall/Win/Spr/Sum
WR-121	English Composition	4	Prerequisite: WRD-098 or placement in WR-121. Recommended: WRD-090 or placement in RD-115	Fall/Win/Spr/Sum
Choose Arts & Letters or Soc. Science electives	Arts & Letters or Social Science electives	6-8		

## AS Degree, Computer Science PSU-SECOND YEAR

FALL TERM		CREDITS	PREREQUISITIES	QUARTER
CS-201	Computer Systems II	4	Prerequisite: CS-162	Fall
Choose Computer Science rec. electives	Computer Science recommended electives	3-4		
Choose Science electives	Science electives	4		
WINTER TERM				
CS-202	Program Structures	4	Prerequisite: CS-162	Winter
CS-250	Discrete Structures I	4	Prerequisite: MTH-251	Winter
WR-227	Technical Report Writing	4	Prerequisite: WR-121 with a C or better. Recommended: WRD-090 or placement in RD-115	Fall/Win/Spr/Sum
Choose Computer Science rec. electives	Computer Science recommended electives	3-4		
SPRING TERM				
CS-251	Discrete Structures II	4	Prerequisite: CS-250	Spring
Choose Computer Science rec. electives	Computer Science recommended electives	3-4		
Choose Computer Science rec. electives	Computer Science recommended electives	3-4		
Choose Arts & Letters or Social Science electives	Arts & Letters or Social Science electives	3-4		

Credits required for degree: 90-106

### COMPUTER SCIENCE RECOMMENDED ELECTIVES:

Students must choose 12-16 credits from the following the categories of Operating Systems and Additional Languages. Students do not need to complete all of the electives within any one category.

- Operating Systems: Transfer students will be expected to be fluent with UNIX/Linux systems used in university labs. These courses will help students with no Linux experience build the necessary competencies: CS-140 Introduction to Operating Systems (Fall/Spring) and CS-240L Linux Administration (Spring).
- Additional Languages: These courses will help students expand their language repertoire to enhance their marketability and job opportunities: CS-125H HTML & Web Site Design (Fall/Win/Spr/Sum), CS-133S Introduction to Java Script & Server-side Scripting (Winter), CS-234J jQuery Web Development (Spring), and CS-234P PHP/MySQL Web Development (Spring).

## COMPUTER SCIENCE RECOMMENDED ELECTIVES:

Students must choose 12-16 credits from the following the categories of Operating Systems and Additional Languages. Students do not need to complete all of the electives within any one category.

- Operating Systems: Transfer students will be expected to be fluent with UNIX/Linux systems used in university labs. These courses will help students with no Linux experience build the necessary competencies:

CS-140 Introduction to Operating Systems (Fall/Spring) prereq is CS 120

CS-240L Linux Administration (Spring) prereq is CS 140

- Additional Languages: These courses will help students expand their language repertoire to enhance their marketability and job opportunities:

CS-125H HTML & Web Site Design (Fall/Win/Spr/Sum) prereq is CS 120

CS-133S Introduction to Java Script & Server-side Scripting (Winter) prereq is CS 125H

CS-234J jQuery Web Development (Spring) no prereq

CS-234P PHP/MySQL Web Development (Spring) prereq is CS 125H, recommended CS 275

FALL	WINTER	SPRING	SUMMER
CS-140 (4)		CS-140 (4)	
		CS-240L (4)	
CS-125H (3)	CS-125H (3)	CS-125H (3)	CS-125H (3)
	CS-133S (3)		
		CS-234J (3)	
		CS-234P (3)	

**ARTS & LETTERS OR SOCIAL SCIENCE ELECTIVES:** Any 100 level or above Arts & Letters or Social Science course in the prefixes of: (Arts & Letters) ART Art, ASL American Sign Language, BA Business Administration, COMM Communication Studies, ENG English, FR French, GER German, HUM Humanities, J Journalism, MUS Music, MUP Music Performance, PHL Philosophy, R Religious Studies, SPN Spanish, TA Theatre Arts, WR Writing (Social Science) ANT Anthropology, EC Economics, GEO Geography, HST History, PS Political Science, PSY Psychology, SOC Sociology, SSC Social Science, WS Women's Studies

**SCIENCE ELECTIVES:** Any General Education science course listed under prefixes: BI Biology, CH Chemistry, ESR Environmental Science, G Geology, and PH Physics on p.50 of the catalog.

BI-101 General Biology; Cellular Biology  
BI-102 General Biology; Animal Systems  
BI-103 General Biology; Plants and the Ecosystem  
BI-112 General Biology for Health Sciences  
BI-160 Bird ID & Taxonomy  
BI-160L Bird ID & Taxonomy Lab  
BI-165C Natural History of the Oregon Coast  
BI-165CL Natural History/Oregon Coast Lab  
BI-165D Natural History of the Western Deserts  
BI-165T Natural History of Tropical Ecosystems  
BI-175, BI-176, BI-177 Integrated Science Inquiry  
BI-204 Elementary Microbiology  
BI-211 General Biology for Science Majors (Cellular Biology)  
BI-212 General Biology for Science Majors (Animal Biology)  
BI-213 General Biology for Science Majors (Plant Biology & Ecology)  
BI-231 Human Anatomy and Physiology I  
BI-232 Human Anatomy and Physiology II  
BI-233 Human Anatomy and Physiology III  
BI-234 Introductory Microbiology

CH-104, CH-105, CH-106 Introductory Chemistry  
CH-112 Chemistry for Health Sciences  
CH-114 Chemistry in Art  
CH-221, CH-222, CH-223 General Chemistry

ESR-171, ESR-172, ESR-173 Environmental Science

G-101, G-102, G-103 General Geology  
G-145 Geology of Pacific Northwest  
G-148 Volcanoes & Earthquakes  
G-201, 202, 203 General Geology

PH-104, PH-121 Not in catalog  
PH-121, PH-122, PH-123 General Astronomy  
PH-201, PH-202, PH-203 General Physics  
PH-211, PH-212, PH-213 General Physics With Calculus