

COMPUTER SCIENCE General ASOT-CS Degree

Computer Science

Associate of Science Oregon Transfer

PROGRAM MISSION

Computer Science (CS) is the study of programs, data, computing machinery, and how these interact. The CS degree is computer science-focused, lower-division, general education requirements accepted by public universities in Oregon.

PROGRAM DESCRIPTION

The Computer Science program is to provide students with a quality education that motivates students to reach their full potential through computer programming, and computer logic skills necessary for transfer, career success, and lifelong learning.

PROGRAM OUTCOMES

Students who complete the Computer Science AS will have the knowledge, skills, and abilities to:

1. Acquire new information and adapt to changes in the computer technology field
2. Apply a logical and systematic approach to solve problems
3. Use written, oral, and visual interpersonal skills to communicate with individuals or small groups
4. Design and implement computer software applications
5. Evaluate and compare different algorithms applicable to a given task

CAREER CONSIDERATIONS

Computer science knowledge is built upon a foundation that allows graduates to explore a wide range of career possibilities. Popular computer science careers include programming and software development, computer hardware innovation and development, testing mathematical algorithms, managing the technological infrastructure of an organization, and digital security.

NOTES:

Majors in computer science are offered at OSU, PSU, SOU, UO, and WOU in Oregon. Please be aware that the core CS curriculum and major options vary at the above-listed schools.

Students who are unsure which university they will transfer to can start with the General ASOT-CS option. The ASOT-CS degree does not guarantee admission to Oregon universities, admission to a competitive computer science major, or junior standing in a major. Students should select a university early to ensure electives are tailored for requirements at the intended transfer institution.

Note that each CS core course must be completed with a grade of "C" or better. Many CS programs have competitive admission. Minimum GPA and grades will not generally be high enough to guarantee admission into any transfer institution.

PROGRAM COURSE REQUIREMENTS

Year One

CS 160	Orientation to Computer Science	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
CIS 275	Introduction to Database Management Systems I***	4
MTH 251	Calculus I	5
MTH 252	Calculus II	4
WR 121	Academic Composition*	4
WR 122 or WR 227	Argument, Research, and Multimodal Comp* or Technical Writing*	4
	Approved Elective	4
	Arts & Letters Elective**	3
	Social Sciences Elective**	3
	Social Sciences Elective**	3

Year One Credits 46

Year Two

	Arts & Letters Elective**	3
	Arts & Letters Elective**	3
CIS 151C	Introduction to Networks***	4
CS 260	Data Structures	4
CS 271	Computer Architecture & Assembly Language***	4
HPE 295	Wellness & Health Assessment	3
PE 102 or higher	Physical Education*** or Exclude PE199 or PE299	1-4
PH 211	General Physics w/Calculus	5
PH 212	General Physics w/Calculus	5
PH 213	General Physics w/Calculus	5
	Social Sciences Elective**	3
	Social Sciences Elective**	3
SP 111	Fundamentals of Public Speaking	4

Year Two Credits 47- 50

* A grade of C or better must be attained in the courses indicated.

** One Arts & Letters Elective or Social Sciences Elective must meet Cultural Literacy requirement.

*** Recommended Computer Science Elective

Many of these courses are offered only once each year at UCC (and are Prerequisites for subsequent courses), and students should meet with a UCC Faculty or Advisor to develop a customized educational planner prior to beginning the program. Consult with a UCC faculty advisor before beginning first term at UCC as a CS transfer major.

COMPUTER SCIENCE, continued

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Approved Electives

CIS 125D	Computer Applications – Database	3
CIS 125S	Computer Applications – Spreadsheet Software	3
CIS 151C	Introduction to Networks	4
CIS 195	Authoring for the Web I	4
CIS 240M	Installing & Configuring Microsoft Windows Server	4
CIS 275	Introduction to Database Management Systems I	4
CIS 276	Introduction to Database Management Systems II	4
CIS 295	Authoring for the Web II	4
CS 271	Computer Architecture & Assembly Language	4
ENGR 201	Electrical Fundamentals I	4
ENGR 271	Digital Logic Design	3
ENGR 272	Digital Logic Design Lab	1
MTH 112	Elementary Functions	4
MTH 231	Elements of Discrete Mathematics I	4
MTH 253	Calculus III	4
MTH 254	Vector Calculus I	4
MTH 261	Introduction to Linear Algebra	2
PE 102	Physical Education or higher (exclude PE 199 or PE 299)	1-4
WR 122	Argument, Research, & Multimodal Composition	4
WR 227	Technical Writing	4

COMPUTER SCIENCE General AS-CS Degree

Computer Science

Associate of Science OSU Applied Option

PROGRAM COURSE REQUIREMENTS

Year One

CS 160	Orientation to Computer Science	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
CIS 275	Introduction to Database Management Systems I***	4
HPE 295	Wellness & Health Assessment	3
MTH 251	Calculus I	5
MTH 252	Calculus II	4
WR 121	Academic Composition*	4
WR 122	Argument, Research, and Multimodal Comp*	4
Arts & Letters Elective**		3
Biological Science with Lab		4
Social Sciences Elective**		3
Social Sciences Elective*		3

Year One Credits 49

Year Two

CIS 195	Authoring for the Web I	4
CS 260	Data Structures	4
CS 271	Computer Architecture & Assembly Language	4
CIS 295	Authoring for the Web II	4
MTH 231	Elements of Discrete Mathematics I	4
MTH 265	Statistics for Scientists and Engineers	4
SP 111	Fundamentals of Public Speaking	4
WR 227	Technical Writing*	4
Arts & Letters Elective**		3
Biological Science with Lab or Physical Science with Lab		5
Physical Science with Lab		5
Social Sciences Elective**		3

Year Two Credits 47-48

Computer Science

Associate of Science OSU Systems Option

PROGRAM COURSE REQUIREMENTS

Year One

CS 160	Orientation to Computer Science	4
CS 161	Computer Science I	4
CS 162	Computer Science II	4
HPE 295	Wellness & Health Assessment	3
MTH 251	Calculus I	5
MTH 252	Calculus II	4
MTH 253	Calculus III	4
MTH 261	Introduction to Linear Algebra	2
WR 121	Academic Composition*	4
WR 122	Argument, Research, and Multimodal Comp*	4
Arts & Letters Elective**		3
Biological Science with Lab		4
Social Sciences Elective**		3
Social Sciences Elective*		3

Year One Credits 51

Year Two

CIS 195	Authoring for the Web I	4
CIS 295	Authoring for the Web II	4
CS 260	Data Structures	4
ENGR 271	Digital Logic Design	3
ENGR 272	Digital Logic Design Lab	1
MTH 231	Elements of Discrete Mathematics I	4
MTH 254	Vector Calculus I	4
MTH 265	Statistics for Scientists and Engineers	4
PH 211	General Physics w/Calculus	5
PH 212	General Physics w/Calculus	5
PH 213	General Physics w/Calculus	5
SP 111	Fundamentals of Public Speaking	4
Arts & Letters Elective**		3

Year Two Credits 50