

# COMPUTER SCIENCE - ASSOCIATE OF SCIENCE OREGON TRANSFER (ASOT)

## Description

Any student who earns the Associate of Science/Oregon Transfer-Computer Science degree on their official Oregon college transcript meets the lower division general education requirements of baccalaureate degree programs of any Oregon public university. Students transferring under the ASOT/CS agreement will have junior status for registration purposes. The ASOT/CS degree was created through collaboration between members of the Oregon Council of Computer Chairs (OCCC) which includes Oregon community college faculty and administration and Oregon public university computer science chairs and faculty. The degree provides general guidelines for a computer science major, however, GPA and course requirements are **NOT** guaranteed to have been satisfied with this degree. Students are encouraged to refer to the catalog of the specific university to which they plan to transfer to ensure accuracy of academic planning. Students are also encouraged to contact an adviser at the transfer school as early as possible before or after starting COCC classes.

## Learning Outcomes

### Arts & Letters

1. Interpret and engage in the Arts & Letters, making use of the creative process to enrich the quality of life; and
2. Critically analyze values and ethics within a range of human experience and expression to engage more fully in local and global issues.

### Cultural Literacy

1. Identify and analyze complex practices, values, and beliefs and the culturally and historically defined meanings of difference.

### Health

1. Explain the relationship between human behavior and health.

### Mathematics

1. Use appropriate mathematics to solve problems; and
2. Recognize which mathematical concepts are applicable to a scenario, apply appropriate mathematics and technology in its analysis, and then accurately interpret, validate, and communicate the results.

### Science or Computer Science

1. Gather, comprehend, and communicate scientific and technical information in order to explore ideas, models and solutions and generate further questions;
2. Apply scientific and technical modes of inquiry, individually, and collaboratively, to critically evaluate existing or alternative explanations, solve problems, and make evidence-based decisions in an ethical manner; and

3. Assess the strengths and weaknesses of scientific studies and critically examine the influence of scientific and technical knowledge on human society and the environment.

### Social Science

1. Apply analytical skills to social phenomena in order to understand human behavior; and
2. Apply knowledge and experience to foster personal growth and better appreciate the diverse social world in which we live.

### Speech/Oral Communication

1. Engage in ethical communication processes that accomplish goals;
2. Respond to the needs of diverse audiences and contexts; and
3. Build and manage relationships.

### Writing and Information Literacy

1. Read actively, think critically, and write purposefully and capably for academic and, in some cases, professional audiences;
2. Recognize and articulate the need for information, and then locate, evaluate, and ethically utilize that information to communicate effectively; and
3. Demonstrate appropriate reasoning in response to complex issues.

## Entrance Requirements

While this program has no formal entrance requirement, individual courses may have prerequisites which must be met prior to enrollment.

## Course Requirements

Course	Title	Credits
<b>General Education/Foundational</b>		
Health: ( <a href="https://catalog.cocc.edu/degree-certificate-overview/general-education/#fhe">https://catalog.cocc.edu/degree-certificate-overview/general-education/#fhe</a> )		
Choose 3 credits <sup>1</sup>		3
Mathematics: ( <a href="https://catalog.cocc.edu/degree-certificate-overview/general-education/#fma">https://catalog.cocc.edu/degree-certificate-overview/general-education/#fma</a> )		
MTH 251	Calculus I (or higher)	4
Oral Communication: ( <a href="https://catalog.cocc.edu/degree-certificate-overview/general-education/#foc">https://catalog.cocc.edu/degree-certificate-overview/general-education/#foc</a> )		
Choose one course		3-4
Writing: ( <a href="https://catalog.cocc.edu/degree-certificate-overview/general-education/#fwi">https://catalog.cocc.edu/degree-certificate-overview/general-education/#fwi</a> )		
WR 121	Academic Composition	4
WR 122 or WR 227	Argument, Research, and Multimodal Composition Technical Writing	4
Recommend: WR 227		
<b>General Education/Discipline studies</b>		
Cultural Literacy:		

One course from the following categories must be designated as cultural literacy on the Discipline Studies list (credits count once).

Arts and Letters: (<https://catalog.cocc.edu/degree-certificate-overview/general-education/#dal>)

Choose at least three courses from at least two prefixes 9-12

Social Science: (<https://catalog.cocc.edu/degree-certificate-overview/general-education/#dss>)

Choose at least four courses from at least two prefixes 12-16

Science/Math/Computer Science: (<https://catalog.cocc.edu/degree-certificate-overview/general-education/#dsn>)

MTH 252 Calculus II 4

Choose three science courses designated as lab science courses from the Discipline Studies list 9-15

#### Program Requirements

CS 160 Computer Science Orientation 4

CS 161 Computer Science I 4

CS 162 Computer Science II 4

CS 260 Data Structures 4

#### Electives

Choose enough electives to reach a minimum total of 90 overall degree credits <sup>2</sup> 22

Total Credits 90-104

<sup>1</sup> HHPA activity courses (1 credit each) are not to be duplicated.

<sup>2</sup> Elective credits must number 100 or above with a maximum of 12 CTE credits. Students are encouraged to plan these credits carefully in consultation with university-specific CS program requirements.

## Advising Notes

Oregon State University Cascades campus ([osucascades.edu](http://osucascades.edu)) (<http://osucascades.edu/>) offers a Bachelor of Science, Computer Science program, with tracks in Software Engineering or Software Entrepreneurship. Students are recommended to reference current degree requirements including required courses and GPA. At the time of this publication, the following courses are recommended in the first 90 credits: COCC courses CS 260 Data Structures, MTH 231 Discrete Mathematics, BA 217 Accounting Fundamentals, BA 250 Entrepreneurship; OSU courses CS 290 Web Development, CS 325 Algorithm Analysis, CS 340 Introduction to Databases, SE 201 Software Development.

## Performance Standards

- Academic Requirements:
  - Students must have a 2.0 cumulative GPA to earn a COCC certificate or degree.
  - Options for additional standards:
    - All courses in the program must be completed with a grade of C or higher.
- Additional Requirements:
  - None

## Sample Plan

First Term		Credits
CS 160	Computer Science Orientation	4
Health (3 credits with HHP prefix) <sup>1</sup>		3
MTH 251	Calculus I	4
WR 121	Academic Composition	4
Credits		15
Second Term		Credits
CS 161	Computer Science I	4
MTH 252	Calculus II	4
Oral Communication (choose one course)		3-4
Writing (recommend WR 227)		4
Credits		15-16
Third Term		Credits
CS 162	Computer Science II	4
Discipline Studies Arts & Letters		3-4
Discipline Studies Social Science		3-4
Discipline Studies Science/Math/Computer Science		3-5
Credits		13-17
Fourth Term		Credits
CS 260	Data Structures	4
Discipline Studies Arts & Letters		3-4
Discipline Studies Social Science		3-4
Elective <sup>2</sup>		3-4
Elective <sup>2</sup>		3-4
Credits		16-20
Fifth Term		Credits
Discipline Studies Arts & Letters		3-4
Discipline Studies Social Science		3-4
Discipline Studies Science/Math/Computer Science		3-5
Elective <sup>2</sup>		3-4
Elective <sup>2</sup>		3-4
Credits		15-21
Sixth Term		Credits
Discipline Studies Science/Math/Computer Science		3-5
Elective <sup>2</sup>		4
Elective <sup>2</sup>		3-4
Elective <sup>2</sup>		3-4
Elective <sup>2</sup>		3-4
Credits		16-21
Total Credits		90-110