AST-COMPUTER SCIENCE: PSU, OSU, OR UO TRANSFER TRACK

This Associate of Science Transfer in Computer Science (AST-CS) prepares students to transfer to a computer science program at:

- Portland State University (https://www.pdx.edu/computer-science/) (PSU)
- Oregon State University (https://catalog.oregonstate.edu/college-departments/engineering/school-electrical-engineering-computer-science/computer-science-ba-bs-hba-hbs/) (OSU)
- University of Oregon (https://cs.uoregon.edu/) (UO)

Students should work with their adviser, and their preferred transfer college, to pick the right classes. Students who complete the AST-CS will also complete the statewide Major Transfer Map (MTM) for Computer Science, and the Oregon Core Transfer Map (CTM.)

This plan is specifically designed for transfer to a four-year institution and is not intended for students who seek direct entry into the job market after completion of an associate degree.

Degree Requirements

Code	Title	Credits
	Computer Science Core, 5 courses (p. 1)	20
	Discrete Structures, 2 courses (p. 1)	8
	Calculus, 2 courses (p. 1)	10
	Lab science, 1 sequence from list (p. 1)	12-15
	Written Communication, 2 courses (p. 1)	7-8
COMM111Z	Public Speaking ★	4
	Arts & Letters, 2 courses (p. 1)	6-8
	Social Science, 2 courses (p. 3)	6-8
	Cultural Literacy, 1 course (p. 4)	
	Electives, if needed to reach 90 credits (p. 5)	9-14
	Additional Requirements (p. 5)	
Total Credits		**90**

Computer Science Core

Five (5) courses:

Code	Title	Credits
CS160	Computer Science Orientation ★	4
CS161	Computer Science I	4
CS162	Computer Science II	4
CS205	Systems Programming and Architecture	4
CS260	Data Structures	4

Discrete Structures

Two (2) courses:

Code	Title	Credits
CS250	Discrete Structures I	4
CS251	Discrete Structures II	4

Calculus

Two (2) courses:

Code	Title	Credits
MTH251Z	Differential Calculus	4
MTH252Z	Integral Calculus	4

Lab Science

Choose one (1) sequence:

Code	Title	Credits
Biology		
BI221Z & BI222Z & BI223Z	Principles of Biology: Cells and Principles of Biology: Organisms and Principles of Biology: Ecology and Evolution	15
Chemistry		
CH221Z & CH227Z	General Chemistry I and General Chemistry I Laboratory	5
CH222Z & CH228Z	General Chemistry II and General Chemistry II Laboratory	5
CH223Z & CH229Z	General Chemistry III and General Chemistry III Laboratory	5
Chemistry & Biology		
CH221Z & CH227Z	General Chemistry I and General Chemistry I Laboratory	5
BI221Z & BI222Z	Principles of Biology: Cells and Principles of Biology: Organisms	10
Geology		
G201 & G202 & G203	Principles of Physical Geology 1 and Principles of Physical Geology 2 and Principles of Historical Geology	12
Physics		
PH201 & PH202 & PH203	General Physics I and General Physics II and General Physics III	15
Physics w/ Calculus		
PH211 & PH212 & PH213	General Physics with Calculus I and General Physics with Calculus II and General Physics with Calculus III	15

Written Communication

Two (2) courses:

Code	Title	Credits
WR121Z	Composition I ★	4
WR227Z	Technical Writing ★	4

Arts & Letters

Two (2) courses:

Code	Title	Credits
Art/Art History		
ART115	Basic Design I: Two-Dimensional	4
ART116	Basic Design II: Color Theory	4
ART117	Basic Design III: Three- Dimensional	4
ART204	History of Western Art: Prehistoric - Byzantine ★	4
ART205	History of Western Art: Medieval - Renaissance ★	4

ART206	History of Western Art: Baroque - Modern ★	4
ART211	Survey of Visual Arts ★ ◓	4
ART215P	Survey in Visual Arts: Photography	3
ART225	Digital Art Toolbox	4
ART226	Digital Drawing and Imaging	4
ART227	Introduction to Animation	4
ART231	Drawing I	4
ART232	Drawing II	4
ART233	Drawing III	4
ART234	Figure Drawing I	4
ART235	Figure Drawing II (if taken summer 2019 or later)	4
ART236	Figure Drawing III (if taken summer 2019 or later)	4
ART240	Character Design and Illustration	4
ART244	Visual Storytelling	4
ART254	Ceramics I	4
ART255	Ceramics II	4
ART256	Ceramics III	4
ART257	Jewelrymaking/Metalsmithing I	4
ART258	Jewelrymaking/Metalsmithing II	4
ART259	Jewelrymaking/Metalsmithing III	4
ART260	Introduction to Digital Photography	4
ART261	Black and White Film Photography	3
ART262	Intermediate Black and White Film Photography	3
ART271	Printmaking I: Screenprint and Woodcut	4
ART272	Printmaking II: Silkscreen, Woodcut, and Intaglio	4
ART273	Printmaking III	4
ART281	Painting I	4
ART282	Painting II (if taken summer 2019 or later)	4
ART283	Painting III (if taken summer 2019 or later)	4
ART291	Sculpture I	4
ART292	Sculpture II	4
ART293	Sculpture III	4
ART294	Watercolor I	4
ART296	Watercolor II	4
ART297	Watercolor III (if taken summer 2019 or later)	4

Communication / Speech (cannot be same course used to fulfill Oral Communication requirement)

COMM100Z	Basic Speech Communication ★	4
COMM111Z	Public Speaking ★	4
COMM114	Argument and Critical Discourse	3
COMM115	Introduction to Intercultural Communication ★ ◓	4
COMM218Z	Interpersonal Communication ★	4
COMM219	Small Group Communication	3

Creative Writing

WR240	Creative Writing: Nonfiction	4
WR241	Creative Writing: Fiction I ★	4
WR242	Creative Writing: Poetry I ★	4
WR244	Creative Writing: Poetry II	4
WR245	Creative Writing: Fiction II	4

English / Literature

ENG104Z	Introduction to Fiction ★	4
ENG105Z	Introduction to Drama ★	4
ENG106Z	Introduction to Poetry	4
ENG201	Shakespeare	4
ENG204	British Literature I: Old English to Renaissance ★ ◓	4
ENG205	British Literature II: Age of Enlightenment to Present ★ ◓	4
ENG212	Latin American Literature ★	4
ENG218	Arthurian Legends	4
ENG222	Women's Literature ◓	3
ENG250	Introduction to Mythology	4
ENG253	Survey of American Literature I ★ ◓	4
ENG254	Survey of American Literature II ★ ◓	4
ENG257	Introduction to African American Literature ◓	4
ENG261	Literature of Science Fiction ★ ◓	4
ENG271	World Literature: The Classical World (Ancient Literature to 1000 C.E.) ◓	4
ENG272	World Literature: 1000 to 1800 C.E. ◓	4
ENG273	World Literature: 1800 C.E. to the Present ◓	4

Ethics in the Workplace

| HUM202 | Ethics in the Workplace ★ ◓ | 3 |

Film Studies

FA257	Films and Society ★ ◓	4
FA258	Understanding the Film ★ ◓	4
FA266	Film Directors ◓	4
FA270	Film Genres ★	4

Modern Languages (second-year)

ASL201	Second-year American Sign Language I ◓	4
ASL202	Second-year American Sign Language II ◓	4
ASL203	Second-year American Sign Language III ◓	4
JPN201	Second-year Japanese I ◓	5
JPN202	Second-year Japanese II ◓	5
JPN203	Second-year Japanese III ◓	5
SPAN201	Second-year Spanish I ◓	4
SPAN202	Second-year Spanish II ◓	4
SPAN203	Second-year Spanish III ◓	4

Music

MUS101	Music Fundamentals	3
MUS103	Jazz History	3
MUS105	History of Rock	3
MUS111	Music Theory I	3
MUS112	Music Theory II	3
MUS113	Music Theory III	3
MUS201	Music in Cinema ◓	3
MUS211	Music Theory IV ◓	3
MUS212	Music Theory V ◓	3
MUS213	Music Theory VI ◓	3
MUS268	Music History: Baroque to Romantic ◓	4
MUS279	Popular Songwriting	3

Philosophy

| PHL191 | Language and the Layout of Argument | 4 |
| PHL201 | Introduction to Philosophy ★ ◓ | 4 |

PHL202	Fundamental Ethics ★ 🌐	4
Religion		
R210	World Religions ★ 🌐	3
R211	History of the Old Testament ★ 🌐	3
R212	History of the New Testament ★ 🌐	3
Theatre Arts		
TA101	Appreciating Theatre	3
TA106	Theatre History: Origins to the Renaissance ★ 🌐	3
TA107	Theatre History: Restoration to Contemporary ★ 🌐	3
TA121	Costuming 🌐	3
TA141	Acting Fundamentals I	3
TA142	Acting Fundamentals II	3
TA143	Acting Fundamentals III	3
TA148	Movement for the Actor	3

Social Science

Two (2) courses:

Code	Title	Credits
General Social Science		
SSC100	Introduction to Social Entrepreneurship	4
Anthropology		
ANTH101	Introduction to Biological Anthropology ★	4
ANTH102	Introduction to Archaeology and World Prehistory ★ 🌐	4
ANTH103	Introduction to Cultural Anthropology 🌐	4
ANTH140	Language and Culture ★ 🌐	4
Communication		
COMM115	Introduction to Intercultural Communication ★ 🌐	4
Economics		
EC115	Introduction to Economics ★	3
EC201Z	Principles of Economics I: Microeconomics ★	4
EC202Z	Principles of Economics II: Macroeconomics ★	4
Geography		
GEOG105	Introduction to Physical Geography	3
GEOG106	Introduction to World Regional Geography 🌐	3
GEOG107	Introduction to Cultural Geography 🌐	3
GEOG202	The Geography of Europe 🌐	3
GEOG206	Geography of Oregon 🌐	3
GEOG209	Geography of the Middle East and North Africa 🌐	3
GEOG214	Geography of Mexico and Central America 🌐	3
GEOG290	Environmental Problems and Restoration	3
History		
HST101	Western Civilization: Ancient and Classical Europe 🌐	4
HST102	Western Civilization: Medieval and Early Modern Europe 🌐	4
HST103	Western Civilization: Modern Europe 🌐	4
HST110	Ancient World History ★ 🌐	4
HST111	Medieval World History ★ 🌐	4
HST112	Modern World History ★ 🌐	4
HST195	History of the Vietnam War 🌐	4

HST201	U.S. History: Pre-Colonial-1840 ★	4
HST202	U.S. History: 1840 - 1917 ★	4
HST203	U.S. History: 1910 - Present ★	4
HST204	Women in U.S. History 🌐	4
HST225	Women in World History 🌐	4
HST237	America in the 1960s 🌐	4
HST240	History of Oregon 🌐	4
HST264	African-American History: 1500 - 1870s ★ 🌐	4
HST265	African-American History: 1870 - Present ★ 🌐	4
HST270	History of Mexico 🌐	4
International Studies		
INTL101	Introduction to International Studies ★ 🌐	4
Journalism		
J211	Introduction to Mass Communications	3
Music History		
MUS103	Jazz History (if taken summer 2020 or later)	3
MUS105	History of Rock (if taken summer 2020 or later)	3
MUS201	Music in Cinema 🌐	3
MUS268	Music History: Baroque to Romantic 🌐 (if taken summer 2020 or later)	4
MUS279	Popular Songwriting	3
Political Science		
PS200	Introduction to Political Science ★	4
PS201	American Government ★	4
PS203	State and Local Governments	4
PS204	Introduction to Comparative Politics	4
PS205	International Relations ★ 🌐	4
PS209	Problems in American Politics	4
PS215	Global Issues	4
PS217	Introduction to Public Land Management: The Politics of Recreation	3
PS225	Political Ideology: Ideas About Government	4
PS241	Introduction to Political Terrorism ★	4
Psychology		
PSY101	Psychology of Human Relations ★	3
PSY151	Introduction to the Social Sciences	3
PSY201Z	Introduction to Psychology I ★	4
PSY202Z	Introduction to Psychology II ★	4
PSY214	Introduction to Personality 🌐	4
PSY216	Social Psychology	3
PSY231	Human Sexuality	3
PSY232	Sexuality and Society ★ 🌐	3
PSY237	Human Development ★	4
PSY239	Introduction to Abnormal Psychology ★	4
Sociology		
SOC204Z	Introduction to Sociology ★	4
SOC205Z	Social Change and Institutions ★	4
SOC206Z	Social Problems ★	4
SOC213	Race Relations in the United States ★ 🌐	3
SOC215	Gender and Society ★ 🌐	3
SOC216	Sociology of the Family ★	3

SOC223	Sociology of Aging ★	3
Theatre History		
TA106	Theatre History: Origins to the Renaissance ★ ❂ (if taken summer 2021 or later)	3
TA107	Theatre History: Restoration to Contemporary ★ ❂ (if taken summer 2021 or later)	3
Women's Studies		
WS101	Introduction to Women's Studies ★ ❂	3
World Literature		
ENG271	World Literature: The Classical World (Ancient Literature to 1000 C.E.) ❂ (if taken summer 2020 or later)	4
ENG272	World Literature: 1000 to 1800 C.E. ❂ (if taken summer 2020 or later)	4
ENG273	World Literature: 1800 C.E. to the Present ❂ (if taken summer 2020 or later)	4

Cultural Literacy

One (1) course from Arts & Letters, Social Science, or elective that is designated as fulfilling cultural literacy:

Cultural Literacy is the only degree requirement that can be "double-dipped."
For example:

- MUS268 will fulfill the Cultural Literacy requirement, **and** count toward either Arts & Letters *or* Social Science.
- COMM115 will fulfill the Cultural Literacy requirement, **and** count toward either Oral Communication *or* Arts & Letters.

Always check your official degree audit on MyMHCC to see how courses are counting toward your chosen degree's requirements.

Code	Title	Credits
ANTH102	Introduction to Archaeology and World Prehistory ★ ❂	4
ANTH103	Introduction to Cultural Anthropology ❂	4
ANTH140	Language and Culture ★ ❂	4
ART211	Survey of Visual Arts ★ ❂	4
ASL201	Second-year American Sign Language I ❂	4
ASL202	Second-year American Sign Language II ❂	4
ASL203	Second-year American Sign Language III ❂	4
COMM115	Introduction to Intercultural Communication ★ ❂	4
ENG204	British Literature I: Old English to Renaissance ★ ❂	4
ENG205	British Literature II: Age of Enlightenment to Present ★ ❂	4
ENG222	Women's Literature ❂	3
ENG253	Survey of American Literature I ★ ❂	4
ENG254	Survey of American Literature II ★ ❂	4
ENG257	Introduction to African American Literature ❂	4
ENG261	Literature of Science Fiction ★ ❂	4
ENG271	World Literature: The Classical World (Ancient Literature to 1000 C.E.) ❂	4
ENG272	World Literature: 1000 to 1800 C.E. ❂	4
ENG273	World Literature: 1800 C.E. to the Present ❂	4
FA257	Films and Society ★ ❂	4
FA258	Understanding the Film ★ ❂	4
FA266	Film Directors ❂	4
GEOG106	Introduction to World Regional Geography ❂	3
GEOG107	Introduction to Cultural Geography ❂	3
GEOG202	The Geography of Europe ❂	3
GEOG206	Geography of Oregon ❂	3
GEOG209	Geography of the Middle East and North Africa ❂	3
GEOG214	Geography of Mexico and Central America ❂	3
HST101	Western Civilization: Ancient and Classical Europe ❂	4
HST102	Western Civilization: Medieval and Early Modern Europe ❂	4
HST103	Western Civilization: Modern Europe ❂	4
HST110	Ancient World History ★ ❂	4
HST111	Medieval World History ★ ❂	4
HST112	Modern World History ★ ❂	4
HST195	History of the Vietnam War ❂	4
HST204	Women in U.S. History ❂	4
HST225	Women in World History ❂	4
HST237	America in the 1960s ❂	4
HST240	History of Oregon ❂	4
HST264	African-American History: 1500 - 1870s ★ ❂	4
HUM202	Ethics in the Workplace ★ ❂ (if taken summer 2019 or later)	3
INTL101	Introduction to International Studies ★ ❂	4
JPN201	Second-year Japanese I ❂	5
JPN202	Second-year Japanese II ❂	5
JPN203	Second-year Japanese III ❂	5
MUS201	Music in Cinema ❂	3
MUS211	Music Theory IV ❂	3
MUS212	Music Theory V ❂	3
MUS213	Music Theory VI ❂	3
MUS268	Music History: Baroque to Romantic ❂	4
PHL201	Introduction to Philosophy ★ ❂	4
PHL202	Fundamental Ethics ★ ❂	4
PS205	International Relations ★ ❂	4
PSY214	Introduction to Personality ❂	4
PSY232	Sexuality and Society ★ ❂	3
R210	World Religions ★ ❂	3
R211	History of the Old Testament ★ ❂	3
RD117	Critical Reading ★	3
SOC213	Race Relations in the United States ★ ❂	3
SOC215	Gender and Society ★ ❂	3
SPAN201	Second-year Spanish I ❂	4
SPAN202	Second-year Spanish II ❂	4
SPAN203	Second-year Spanish III ❂	4
TA106	Theatre History: Origins to the Renaissance ★ ❂	3

| TA107 | Theatre History: Restoration to Contemporary ★ 🌐 | 3 |
| WS101 | Introduction to Women's Studies ★ 🌐 | 3 |

Electives

- Any college-level (100 level or above) transferable course.
- Up to 12 credits of career-technical courses.
- Up to 6 credits of PE185, 15 credits of IECC (200-level), and 12 credits of Lower Division Collegiate Cooperative Education Internship may be applied as elective credits to the AST. See the Course Information section for elective credit/course eligibility.
- When students complete courses at more than one Oregon community college, the AST-granting institution will apply courses that students transfer in from other Oregon community colleges to meet Core Transfer Map and Major requirements as intended and as identified by the approved course lists at the community college where and when they were taken.

Additional Requirements

To be awarded the AST degree, students must:

- Complete all requirements to total 90 applicable degree credits.
- Pass all courses with a grade of C or higher.
- Have a minimum cumulative GPA of 2.00 at the time the AST is awarded.
- Satisfactorily earn 12 credit hours at MHCC. Non-traditional credit (College Level Examination Program, Experience-Based Credit, Challenge, etc.) does not satisfy this requirement.

If a course is taken as a Satisfactory/Unsatisfactory (S/U) or Pass/No Pass (P/NP), and a student receives an "S" or a "P" grade, it is considered equivalent to a grade of "C" or higher at all Oregon community colleges. However, it is recommended that students take courses for a letter grade and not S/U or P/NP; some individual AST majors may limit S/U or P/NP options for specific requirements, and such limits will be noted in the major specific requirements in the MTM MOU. All major related courses must receive a letter grade to satisfy the MTM requirements.

Courses may not be repeated for credit unless specified in the course description.

★ Course offered online
🌐 Cultural Literacy course