

ASSOCIATE OF SCIENCE IN ENGINEERING (ASEN)

The ASEN degree helps prepare students to transfer to an engineering program at one of Oregon's public universities. The ASEN is tailored for civil and mechanical engineering majors. Students should work with their adviser, and their preferred transfer college, to pick the right classes.

See the MyMHCC portal for printable degree worksheets (https://my.mhcc.edu/ICS/Student_Services/Printable_Degree_Worksheets.jnz).

Degree Requirements

Code	Title	Credits
Engineering Core, 10 courses (p. 1)		42
Mathematics, 5 courses (p. 1)		24
Written Communication, 2 courses (p. 1)		7-8
Oral Communication, 1 course (p. 1)		4
Health & Physical Education (p. 1)		3
Science, 2 courses (p. 2)		10
Arts & Letters, 2 courses (p. 2)		6
Social Science, 2 courses (p. 3)		6
Total Credits		102-103

Engineering Core

10 courses:

Code	Title	Credits
GE101	Engineering Orientation	4
GE115	Engineering Graphics ¹	3
or ENGR248	Engineering Graphics: Solidworks	
GE102	Engineering Computations	3
ENGR211	Statics	4
ENGR212	Dynamics	4
ENGR213	Strength of Materials	4
ENGR201	Electrical Fundamentals I ¹	5
or ET150	Plane Surveying	
PH211	General Physics with Calculus I	5
PH212	General Physics with Calculus II	5
PH213	General Physics with Calculus III	5
Total Credits		42

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- GE115 Engineering Graphics is offered in fall and winter term.
 - ENGR248 Engineering Graphics: Solidworks is offered in winter and spring term.
 - ENGR201 Electrical Fundamentals I is offered in winter term.
 - ET150 Plane Surveying is offered in spring term.

Mathematics

Five courses:

Code	Title	Credits
MTH251	Calculus I: Differential Calculus	5
MTH252	Calculus II: Integral Calculus	5

MTH254	Calculus IV: Multivariable/Vector Calculus Part 1	5
MTH256	Differential Equations	5
MTH261	Linear Algebra	4
Total Credits		24

Writing

Two courses (minimum of 7 credits):

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

Oral Communication

One (1) course:

Code	Title	Credits
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

Health and Physical Education (HPE)

Three (3) credits:

Code	Title	Credits
HE151	Drug Education: Stimulants and Performance Enhancing Drugs	3
HE152	Drug Education: Opioids, Cannabis, Depressants and Hallucinogens	3
HE202	Adult Development and Aging	1
HE204	Nutrition for Health	3
HE205	Diet Appraisal ★	1
HE207	Stress Control Through Activity Intervention	1
HE208	HIV and Other Sexually Transmitted Infections	1
HE209	Sport and Exercise Nutrition	1
HE225	Nutrition ★ (or FN225, if taken summer 2021 or later)	4
HE250	Personal Health and Wellness ★	3
HE251	Wilderness First Aid	2
HE252	First Aid: Responding to Emergencies	3
HE255	Alcohol and the Family	3
HE261	CPR - Cardiopulmonary Resuscitation	1
HE262	Basic Life Support ★	1
HE265	Women's Health ★	3
HE289	Wilderness First Responder	4
HE289L	Wilderness First Responder Part- 2	2
HE289R	Wilderness First Responder - Recertification	2
HPE110	Teambuilding and Group Facilitation	3
HPE120	Introduction to Navigation	1
HPE170	Structure and Function of the Human Body	3
HPE172	Exercise Science	3
HPE174	Fitness Assessment and Programming	3

HPE260	Prevention and Care of Exercise-Related Injuries	3
HPE270	Introduction to Sport Psychology	3
HPE285OL	Wilderness Survival	3
HPE291	Lifeguard Training	2
HPE295	Health and Fitness for Life ★	3
PE185__	PE185 activity course	1

Three (3) credit hours of PE185 may be granted toward an Associate degree at MHCC for completion of military basic training. A copy of the DD214 form or a Joint Services Transcript is required.

Science

Two (2) courses (minimum of nine credits):

Code	Title	Credits
CH221	General Chemistry I	5
CH222	General Chemistry II	5

Arts and 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	Illustration and Cartooning	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
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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

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
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Economics

EC115	Introduction to Economics ★	3
EC201	Principles of Economics I: Microeconomics ★	4
EC202	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 🌐	3
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	3
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
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Journalism

J211	Introduction to Mass Communications	3
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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		
SOC204	General Sociology: Principles of Sociology ★	3
SOC205	General Sociology: Social Institutions ★	3
SOC206	General Sociology: Social Problems ★	3
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

To check your official progress toward graduation, log on to MyMHCC (<https://my.mhcc.edu/>) and click "View My Degree Audit."

- ★ Course offered online
- ☼ Cultural Literacy course

To be awarded an AS in Engineering degree, students must:

- Complete all requirements to total 90 applicable degree credits.
- Earn a grade of "C" or better in all courses applied to the degree, have a minimum GPA of 2.0 in all courses applied to the degree, and have a minimum cumulative GPA of 2.0 at the time the degree 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.

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