

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 or ENGR248 | Engineering Graphics ¹ Engineering Graphics: Solidworks | 3 |
| GE102 | Engineering Computations | 3 |
| ENGR211 | Statics | 4 |
| ENGR212 | Dynamics | 4 |
| ENGR213 | Strength of Materials | 4 |
| ENGR201 or ET150 | Electrical Fundamentals I ¹ Plane Surveying | 5 |
| 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 |
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| MTH251 | Calculus I: Differential Calculus | 5 |
| MTH252 | Calculus II: Integral Calculus | 5 |

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| 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 |
| 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 |
| 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 |

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| 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 |

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| 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)

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|----------|--|---|
| 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

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|-------|-------------------------------|---|
| 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

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|---------|---|---|
| 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

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| HUM202 | Ethics in the Workplace ★🌐 | 3 |
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Film Studies

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

Modern Languages (second-year)

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|--------|---|---|
| ASL201 | Second-year American Sign Language I 🌐 | 4 |
| ASL202 | Second-year American Sign Language II 🌐 | 4 |

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| 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 |
| Economics | | |

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| 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 |
| 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 |

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| PS217 | Introduction to Public Land Management: The Politics of Recreation | 3 | 🌐 Cultural Literacy course |
| 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 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.

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

★ Course offered online