

Engineering Technology Programs: Architectural, Civil, or Mechanical

Engineering Technology is a career-technical career that involves the practical application of science and mathematics along with engineering knowledge, methods, and skills to support activities in design, manufacturing and construction. Engineering technicians provide a critical link between design professionals and craftspeople doing the work. Employment opportunities exist for men and women in this growing, fast-paced, and ever-evolving occupation. Mt. Hood Community College offers Associate in Applied Science degrees in three areas of specialization which are Architectural, Civil, and Mechanical Engineering Technology.

Emphasis is "hands on" experience with much of the coursework focusing on usual tasks that technicians actually perform in industry on a day-to-day basis. Skills and abilities expected of a technician participating in engineering related fields include: computer literacy, problem solving, critical thinking, communication, flexibility, and the ability to work in teams. With the tremendous range of jobs related to engineering technology, some employers may require only a few of these skills where others may need all of them and more.

Listed below are the requirements for all three degrees offered. Questions may be directed to the program adviser as listed for each engineering degree.

NOTE: The course requirements for this program are subject to change each academic year. For MHCC certificate/degree requirements, a student must follow the program requirements the year the student is officially admitted to the program or the year the student is completing the program.

Civil Engineering Technology: Environmental

Associate of Applied Science Degree Program

MHCC Faculty Adviser

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The field of civil engineering is the most visible of the engineering disciplines. The highways and streets we drive on; the airports, harbors, and railroads that connect our country; the water and sewer systems that protect our health; and the dikes and dams that protect our property are all the product of the civil engineering team. The environmental option will provide preparation that allows civil engineering technicians to support civil engineers in the environmental issues related to all areas of city, county and state infrastructure.

First Quarter (Fall)		Credits
ET123	Introduction to Engineering Technology	3
CIS120	Computer Concepts I.....	3
CIS120L	Computer Concepts Lab I.....	1
CH104	General, Organic and Biological Chemistry I ...	5
MTH95	Intermediate Algebra with Right Triangle Trigonometry	5

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Second Quarter (Winter)

ET161	Beginning 2-D Autocad ¹	2
ET162	Intermediate 2-D Autocad ¹	2
CH105	General, Organic and Biological Chemistry II ...	5
MTH111	Pre-Calculus I: Elementary Functions	5
WR121	English Composition	3

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Third Quarter (Spring)

ET142	Civil CAD	3
ET150	Plane Surveying.....	4
CH170	Environmental Chemistry	4
MTH112	Pre-Calculus II: Trigonometry/Geometry	5
WR122	English Composition: Critical Thinking.....	3

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Fourth Quarter (Fall)

ET204	Computer Aided Design II ²	3
ET221	Statics.....	4
EHS101	Environmental Health and Safety Regulations I..	3
ESR271	Environmental Science II: Introduction to Environmental Engineering.....	4
MTH251	Calculus I	4

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Fifth Quarter (Winter)

ET222	Fluid Mechanics	3
ET231	Basic Strengths of Materials.....	4
FT228	Introduction to Geographic Information Systems	3
EHS201	Environmental Health and Safety Regulations II	3
WR227	Technical Report Writing.....	3

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Sixth Quarter (Spring)

ET262	Mechanics of Soils.....	3
ET265	Site Development.....	3
EHS230	Sustainable Business Practice.....	3
HPE295	Health and Fitness for Life.....	3
	Human Relations requirement [‡]	3

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¹ ET154 may be substituted for ET161 and ET162.

² ET163 and ET164 may be substituted for ET204.

[‡] See page 10.