



MECHANICAL ENGINEERING TECHNOLOGY A.A.S.

Offered at these campuses:

N North Campus (Williamsville)

The demand for trained mechanical engineering technicians, knowledgeable in both the theory and application of engineering principles, continues to grow. These professionals serve as the link between engineers and craftsmen, and the Mechanical Engineering Technology Program provides their foundation.

The objective of the Mechanical Engineering Technology Program is to train professionals capable of assuming responsible positions in drafting, CADD, CMM, geometric tolerancing, manufacturing processes, material testing, fluid power, heat power, refrigeration, stress analysis, machine design and instrumentation as well as being able to pursue their education toward a bachelor's degree.

Comprehensive in nature, the Mechanical Engineering Technology Program offers an in-depth study of mechanical engineering technology courses as well as liberal arts and social science courses. Analytical mechanics, strength of materials, fluid mechanics, applied thermodynamics and electricity for mechanical equipment are among the subjects covered in the curriculum. The Mechanical Engineering Technology courses are enriched with laboratory experiences. The program is completed with composition, literature, ethics and social science courses, which help students to better communicate and to participate in meaningful interpersonal relationships.

The Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.



CAREER PATHS

To assume positions as a mechanical technician or continue their education toward a bachelor's degree.

ecc.edu

SPECIAL ADMISSION REQUIREMENTS/PREREQUISITES

MET first-year students must have been placed at MT 126/MT 122 or higher math courses. Students with low math scores are required to start a MET pre-engineering program. This program will provide them with additional courses and will prepare them for the regular MET Program. The pre-engineering students will be placed immediately in the regular MET Program once they register in MT 126 or MT 122.

CURRICULUM

Total Degree Credits: **64.0**

Full-time Students

The course sequence suggested for full-time and part-time students is just one approach to complete the program. Alternate course sequence completions may be suggested to MET students based on their needs, backgrounds, course prerequisite, and course availability.

FIRST YEAR, FALL SEMESTER

ME 104 Technical Drawing	2 cr
ME 114 Analytical Mechanics	3 cr
ME 150 Manufacturing Processes and Materials I	1 cr
ME 151 Lab for ME 150	1 cr
ME 160 Introduction to Computer Concepts in MET	1 cr
ME 161 Lab for ME 160	1 cr
MT 122 Technical Mathematics II	4 cr or
MT 126 College Mathematics II	4 cr
PH 260 Technical Physics I	3 cr
PH 261 Lab for PH 260	1 cr

FIRST YEAR, SPRING SEMESTER

ME 200 Manufacturing Process and Materials II	2 cr
ME 201 Lab for ME 200	1 cr
ME 250 Computer Aided Drafting and Design	2 cr
ME 258 Mechanics of Materials	3 cr
ME 259 Lab for ME 258	1 cr
EN 110 College Composition	3 cr
MT 180 Pre-Calculus Mathematics	4 cr

SECOND YEAR, FALL SEMESTER

ME 260 Instrumentation	2 cr
ME 261 Lab for ME 260	1 cr
ME 262 Geometric Dimensioning and Tolerancing	1 cr
ME 263 Lab for ME 262	1 cr
ME 270 Fluid Mechanics	2 cr
ME 271 Lab for ME 270	1 cr
ME 272 Applied Thermodynamics	3 cr
EN 111 Composition and Interpretation of Literature	3 cr
_____ Social Science Elective	3 cr

SECOND YEAR, SPRING SEMESTER

ME 280 Fluid Power	2 cr
ME 281 Lab for ME 280	1 cr
ME 282 Heat, Power and Refrigeration	2 cr
ME 283 Lab for ME 282	1 cr
ME 288 Basic Electricity for Mechanical Equipment	3 cr
ME 290 Machine Design	2 cr
ME 291 Lab for ME 290	1 cr
ME 298 Mechanical Engineering Technology Internship or Technical Elective	3 cr

Part-time Students

Part-time students can take courses according to pre-requisites and course sequence of full-time student schedule.

Pre-Mechanical (or Extended Program) Sequence

Pre-mechanical courses are offered based on availability of instructor and number of interested students.

Evening Courses

Evening courses are offered based on availability of instructors and number of interested students.

Note: For more information, contact the department secretary at (716) 270-5290.

COURSE SEQUENCE OPTIONS AND ELECTIVES

Math Sequence Options:

Any of the following sequences are allowed with approval of the unit coordinator:

- MT 126, MT 180; **or**
- MT 122, MT 180; **or**
- MT 180, MT 181 for those who intend to continue their education.

Science Sequence Options:

Students are encouraged to take both PH 262/PH 263 and CH 140/CH 141 courses.

- PH 260/PH 261; **or**
- PH 280/PH 281 for those who intend to continue their education.

English Sequence Options:

- EN 110 **and** EN 111

Social Science Electives:

Only one elective from the following list is required.

- EC 100
- EC 104
- GO 101
- HI 101 - HI 104
- PS 100
- SO 100

Note: The course sequence suggested is just one approach to complete the program. Alternate course sequence completions may be suggested to MET students based on their needs, backgrounds, course pre-requisite, and course availability.

CONTACT

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