*Science, Technology, Engineering & Mathematics Division*

**ENGINEERING TECHNOLOGY**

The Engineering Technology Program leads to an associate in science degree. It was developed to meet the need for educational opportunities that will lead to employment in jobs using electro-mechanical skills, computer knowledge and application skills. The need for Engineering Technology graduates who have a strong math/science background and who are well grounded in the application of technology to workplace problems, has been the focus of much attention by the state’s employers.

Connecticut’s business and industry needs technical people who have knowledge in several areas of engineering technology. The increasing application of two or more technologies to achieve desired results in such areas as robotics and computer numerical control has focused our attention on the value of an engineering technology generalist.

The engineering technician is versed in several disciplines including electrical, automated manufacturing, mechanical, and chemical, and also has a good working knowledge of computer systems. The Engineering Technology Program prepares students to be engineering technicians who are able to respond to the changing demands of “high tech” industries, who are able to communicate with both the production worker and the engineer, and who can “wear many hats.”

The Engineering Technology Program is attractive to those with specific career and educational goals that require diversity and to those who are unsure of their interests and/or abilities. Students may tailor a special program to meet specific educational and/or career goals which may include a unique career, job objectives, or a technology-oriented transfer program. While providing a quality education that prepares graduates for immediate employment, the program also enables graduates to transfer to baccalaureate programs at senior institutions. It is also attractive to those presently employed seeking skills enhancement and/or upward mobility.

*General Education Core course listings and definitions appear on pages 53-54. Additional courses may be required. The suggested sequence for full-time students is shown below.*

*Note: To complete the degree in two years, students are advised to complete the courses in the sequence listed beginning in the fall semester.*

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| **Competency or Program Requirement** | **Course Number and Title** | Required Credits |
| **FIRST SEMESTER** |  |  |
| Continuing Learning/Information  Literacy and Ethics | TCN\*H101 Introduction to Engineering Technology | 3 |
| Critical Analysis and Logical  Thinking/Written Communication | ENG\*H101 Composition | 3 |
| Quantitative Reasoning | MAT\*H172 College Algebra | 3 |
| Scientific Reasoning | PHY\*H121 General Physics I | 4 |
| Program Requirement | CAD\*H150 CAD 2D | 3 |
| **SECOND SEMESTER** |  |  |
| Scientific Knowledge | CHE\*H111 Concepts of Chemistry  **OR** CHE\*H121 General Chemistry I1 | 4 |
| Program Requirement | MFG\*H104 Manufacturing Processes | 4 |
| Written Communication | ENG\*H102 Literature and  Composition **OR** ENG\*H200 Advanced  Composition **OR** ENG\*H202  Technical Writing (recommended) | 3 |
| Program Requirement | MAT\*H185 Trigonometric Functions | 3 |
| Program Requirement | Directed Elective (200 level)2 | 3-4 |
| **THIRD SEMESTER** |  |  |
| Oral Communication | Oral Communication course COM\*H173 (recommended) | 3 |
| Program Requirement | MEC\*H114 Statics (fall only) | 3 |
| Program Requirement | MFG\*H106 Computer-Aided  Manufacturing I (fall only) | 3 |
| Program Requirement | EET\*H102 Electrical Applications | 3 |
| Program Requirement | Directed Elective (200 level)2 | 3 |
| **FOURTH SEMESTER** |  |  |
| Social Phenomena | Choose any Social Phenomena course | 3 |
| Program Requirement | MFG\*H275 Mechanics of  Materials **OR** MEC\*H251  Materials Strength (spring only) | 3-4 |
| Program Requirement | Directed Elective (200 level)2 | 3 |
| Program Requirement | Directed Elective (200 level)2 | 3 |
| Program Requirement | Directed Elective (200 level)2 | 3 |

# Total Credits: 63-65

*Any given course may only be used to satisfy one of the competency areas even if it is listed under more than one.*

1 Choose if planning to transfer to a Bachelor's degree program

2 Choose any 200-level CAD\*, EET\*, MAT\*, MEC\*, MFG\*, PHY\* course

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| ***Program Outcomes*** |

*Upon successful completion of all program requirements, graduates will be able to:*

1. Apply appropriate mathematical and scientific principles to engineering technologies.
2. Use state-of-the-art software and hardware.
3. Design and prepare CAD drawings.
4. Perform individually or as a member of a team to complete projects in an industrial environment.
5. Conduct experiments, analyze data, and interpret results from controlled laboratory experimentation in industrial applications.

***Associate***

***Degree***

***Programs***

1. Effectively and efficiently plan, organize, implement, and control projects.
2. Act consistently with the ethical standards and conduct of a professional in engineering technology.
3. Communicate effectively with individuals and groups using written, oral, and computer skills.
4. Possess the educational background needed to:
   1. obtain employment as a technician, and
   2. continue studies toward a B.S. degree in Engineering Technology.

**Also see:**

Electronic Engineering Technology

Engineering Technology

Mechanical Engineering Technology

Manufacturing (Automated) Engineering Technology