

Manufacturing Engineering Technology (A.A.S.)

A Dual Admissions Program with NJIT

Division of Mathematics, Engineering Technologies and Computer Sciences — Curriculum Code: 5420

Will Earn Upon Program Completion: Associate in Applied Science (A.A.S.) Degree

This program is designed to prepare students for employment in the computer-operated manufacturing facilities of existing and emerging industries. It enables students to develop a broad background that can be applied to such areas as mechanical design, quality control, materials testing, facilities design, automation, stress analysis, and sales. Courses emphasize the application of current knowledge and practices to the solution of specific problems.

Program Requirements

GENERAL EDUCATION REQUIREMENTS

Written & Oral Communication (6 credits)

[ENG 101](#) (3 credits)

[ENG 102](#) or [ENG 105](#) (one 3-credit course)

Quantitative Knowledge & Skills (7 credits)

[MTH 113](#) (4 credits)

[MTH 114](#) (3 credits)

Society & Human Behavior (6 credits)

Choose two of the following courses: [ANT 101](#)[ANT 105](#)[ECO 101](#)[ECO 102](#)[POL 101](#)[POL 104](#)[PSY 101](#)[PSY 102](#)[PSY 219](#)[SOC 101](#)[SOC 108](#) or [SOC 219](#) (two 3-credit courses)

Historical Perspective (3 credits)

Choose one of the following history courses: [HST 101](#)[HST 102](#)[HST 111](#)[HST 112](#)[HST 121](#)[HST 122](#)[HST 131](#)[HST 132](#)[HST 134](#)[HST 135](#)[HST 136](#)[HST 137](#)[HST 161](#) or [HST 162](#) (one 3-credit course)

MAJOR COURSE REQUIREMENTS

[ENR 103](#) Engineering Graphics (2 credits)

[ENR 105](#) Applied Computer-Aided Design (2 credits)

[ENR 110](#) Mechanics (3 credits)

[MET 201](#) Manufacturing Processes and Materials (3 credits)

[MET 202](#) Modern Manufacturing Systems And Robotics (4 credits)

[MET 211](#) Machines and Controls (3 credits)

[MET 215](#) Fluid Mechanics (3 credits)
[MET 225](#) Computer Numerical Control (4 credits)
[MET 250](#) Mechanical Engineering Technology Project (2 credits)

ADDITIONAL COURSE REQUIREMENTS

[CSC 112](#) Computer Programming for Engineering and Technology (3 credits)
[ELC 115](#) Electric Circuits: DC and AC (4 credits)
[ELC 218](#) Pulse and Digital Circuits (3 credits)
[PHY 101](#) College Physics I (4 credits)
[PHY 102](#) College Physics II (4 credits)

RECOMMENDED SEQUENCE OF COURSES

Total Credits Required for Degree: 66

First Semester

[ENG 101](#) College Composition I (3 credits)
[ELC 115](#) Electric Circuits: DC and AC (4 credits)
[ENR 103](#) Engineering Graphics (2 credits)
[MTH 113](#) College Algebra with Trigonometry (4 credits)
[PHY 101](#) College Physics I (4 credits)

Second Semester

[ENG 102](#) College Composition II
[ENG 105](#) Technical Writing (3 credits)
[ENR 105](#) Applied Computer-Aided Design (2 credits)
[CSC 112](#) Computer Programming for Engineering and Technology (3 credits)
[MTH 114](#) Unified Calculus I (3 credits)
[PHY 102](#) College Physics II (4 credits)

Summer Session

Society & Human Behavior requirement (3 credits)
History requirement (3 credits)

Third Semester

[ENR 110](#) Mechanics (3 credits)
[MET 201](#) Manufacturing Processes and Materials (3 credits)
[MET 215](#) Fluid Mechanics (3 credits)
[MET 225](#) Computer Numerical Control (3 credits)

Fourth Semester

[ELC 218](#) Pulse and Digital Circuits (3 credits)
[MET 202](#) Modern Manufacturing Systems and Robotics (4 credits)
[MET 211](#) Machines and Controls (3 credits)
[MET 250](#) Mechanical Engineering Technology Project (2 credits)
Society & Human Behavior requirement (3 credits)

NOTES:

(1) The two General Education Integrated Course Goals, Ethical Reasoning & Action and Information Literacy, are both addressed by the required curriculum described above, regardless of specific choices made by the individual student.

(2) This plan assumes the completion of all required developmental courses in Reading, English, and Mathematics as well as other [pre-requisites](#) and [co-requisites](#) for some of the courses, as listed in the Course Descriptions section.