

Mechanical Engineering Technology

Associate of Applied Science (956)

Purpose The Mechanical Engineering Technology program is designed to give the student broad experience and training in the basic concepts of the mechanical engineering technology field. In addition to the general education and mechanical technology courses, this program offers courses in machine design and in computer numeric control applications.

Graduates may seek immediate employment or consider opportunities available to transfer to Bachelor of Technology programs offered by some four-year colleges and universities.

Occupational Objectives The mechanical engineering technician usually serves as a liaison between the engineering and production departments working with the design and development of engineering plans. Responsibilities may include estimating, inspecting, and testing engineering equipment; operating, maintaining, and repairing engineering plants; research and development; sales and representation; and training and education.

Admission Requirements

Applicants must meet the general admission requirements for admission to the college.

Developmental courses **are** required for students with deficiencies in English and mathematics.

Students who do not place into college-level English on the placement test will be required to take developmental courses (i.e., ENG 1, ENG 3, ENG 4, ENG 7).

Students who have not completed Algebra I in high school with a “C” or better will be required to take the placement test. Those who do not place above Algebra I (MTH 3) and into Algebra II (MTH 4) or higher on the placement test will be required to take developmental courses.

Program Requirements Students must take ENG 111 in the first semester of classes.

Articulation Agreement As a result of an articulation agreement with Old Dominion University, students receiving an Associate of Applied Science (AAS) degree in Mechanical Engineering Technology may earn a baccalaureate degree (BS) in Engineering Technology on the Virginia Western Community College campus in Roanoke.

Curriculum and Other Requirements

		Credits
DRF 201-202-203	Computer Aided Drafting and Design I-II-III	9
DRF 226	Computer Aided Machining	3
DRF 238	Computer Aided Modeling and Rendering	3
EGR 216	Computer Methods in Engineering and Technology	3
ENG 111	College Composition I	3
ETR 113*	DC and AC Fundamentals I	4
HLT/PED ²	Health or Physical Education	2
MEC 113	Materials and Processes of Industry	3
MEC 119	Introduction to Basic CNC and CAM	3
MEC 131*	Mechanics I-Statics for Engineering Technology	3
MEC 132*	Mechanics II-Strength of Materials for Engineering Technology	3
MTH 115-116 ⁵	Technical Mathematics I-II	6
PHY 201	General College Physics I	4
SDV 101	Orientation to Engineering and Engineering Technology	1
CST 100	Principles of Public Speaking or CST 105	3
E ¹	Social Science Elective	6
E ³	Technical Elective	3
E ⁴	Humanities/Fine Arts Elective	3

Total Minimum Credits for Degree

65

¹ Social Science electives must be selected from the “Approved List of Transfer Courses.” If the student is transferring to a four-year institution, the student should select the Social Science courses at VWCC that will satisfy the Social Science requirements at the four-year institution.

² Two credits of Health (HLT) or Physical Education (PED) are required of all students. Consult Health courses in the Description of Courses for selection of an approved course. Veterans with an honorable discharge will be awarded HLT/PED credit based on military service.

³ Technical elective should be selected from EGR 126, EGR 206, MTH 157, PHY 202, or see advisor for additional options.

⁴ Humanities/Fine Arts elective must be chosen from the “Approved List of Humanities Transfer Courses.” A two-semester sequence of the same course is strongly recommended. If planning on transfer, contact four-year institution for requirements.

⁵ Students may substitute MTH 166 and MTH 175. See advisor for details.

* This course has a prerequisite. Prerequisites for all courses are listed in the course description section at the back of the catalog.

Suggested Course Sequence

Fall	Spring
DRF 201	DRF 202
EGR 216	DRF 226
ENG 111	MEC 113
MEC 119	MEC 131
MTH 115	MTH 116
SDV 101	Humanities/Fine Arts Elective
Fall	Spring
DRF 203	DRF 238
ETR 113	HLT/PED
HTL/PED	CST 100
MEC 132	Social Science Elective
PHY 201	Technical Elective
Social Science Elective	