

# ABET Mechanical Engineering Technology

## Accreditation

The New Jersey Institute of Technology Mechanical Engineering Technology Program (B.S. Engineering Technology) is accredited by the Engineering Technology Accreditation Commission of ABET, <https://www.abet.org>, under the General Criteria and the Program Criteria for Mechanical Engineering Technology and Similarly Named Programs.



## MET Program Educational Objectives

The undergraduate Mechanical Engineering Technology (MET) Program leads to a Bachelor of Science degree in Engineering Technology. MET has the following Program Educational Objectives:

- (1) Our graduates will possess the strengths to obtain and advance in positions that require analysis, applied design, development, implementation, or oversight of mechanical systems and processes.
- (2) Our graduates will have the knowledge, problem solving ability, and hands-on skills to be successful in careers in the design, installation, manufacturing, testing, evaluation, technical sales, or maintenance of mechanical systems.
- (3) Our graduates will have the foundation to take advantage of opportunities for life-long learning and professional development.

## MET Student Outcomes

Students from the MET Program will attain (by the time of graduation):

- (1) An ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- (2) An ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- (3) An ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- (4) An ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- (5) An ability to function effectively as a member as well as a leader on technical teams.

# MET Program Criteria

The following are the MET Program Criteria:

- a. Application of principles of geometric dimensioning and tolerancing;
- b. Use of computer aided drafting and design software;
- c. Perform selection, set-up, and calibration of measurement tools/instrumentation;
- d. Elements of differential and integral calculus;
- e. Manufacturing processes;
- f. Material science and selection;
- g. Solid mechanics (such as statics, dynamics, strength of materials, etc.);
- h. Mechanical system design;
- i. Thermal sciences (such as thermodynamics, fluid mechanics, heat transfer, etc.);
- j. Electrical circuits (ac and dc) and electronic controls;
- k. Application of industry codes, specifications and standards; and
- l. Technical communications typically used in preparation of engineering proposals, reports, and specifications.

# MET Enrollment and Degrees Awarded

	Academic Year		Enrollment Year					Total Undergrad	Degrees Awarded
			1st	2nd	3rd	4th	5th		Bachelors
Current Year	2022	FT	26	46	74	52		198	62
		PT	2	7	10	36		55	
1	2021	FT	23	30	56	56		165	52
		PT	2	8	9	31		50	
2	2020	FT	9	28	62	59		158	74
		PT	1	4	20	36		61	
3	2019	FT	16	16	71	60		163	66
		PT	2	12	17	49		80	
4	2018	FT	7	24	81	67		179	69
		PT	3	9	13	37		62	