

ABET Mechanical Engineering Technology

Accreditation

The New Jersey Institute of Technology Mechanical option in Engineering Technology (MET) Bachelor of Science program 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.



Engineering
Technology
Accreditation
Commission

MET Program Educational Objectives

The undergraduate program leads to a Bachelor of Science degree in Engineering Technology Mechanical Engineering Technology (MET) Option. The MET program 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	2021	FT	23	30	56	56		165	52
		PT	2	8	9	31		50	
1	2020	FT	9	28	62	59		158	74
		PT	1	4	20	36		61	
2	2019	FT	16	16	71	60		163	66
		PT	2	12	17	49		80	
3	2018	FT	7	24	81	67		179	69
		PT	3	9	13	37		62	
4	2017	FT	14	36	59	70		179	70
		PT	2	11	16	49		78	