ABET Electrical & Computer Engineering Technology

Accreditation

The New Jersey Institute of Technology program in Electrical & Computer Engineering Technology (ECET) is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

ECET Program Educational Objectives

The undergraduate program leads to a Bachelor of Science degree in Engineering Technology Electrical & Computer Engineering Technology (ECET) Option. The ECET program has the following Program Educational Objectives:

(1) Our graduates will establish productive careers in technology-based organizations in such diverse positions as design, manufacturing, teaching, management, system engineering, application engineering and technical sales.

(2) Our graduates will participate in lifelong learning activities including graduate school and other professional education.

ECET Student Outcomes

Students from the ECET 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.

ECET Program Criteria

The following are the MET Program Criteria:

a. the application of circuit analysis and design, computer programming, associated software, analog and digital electronics, and microcomputers, and engineering standards to the building, testing, operation, and maintenance of electrical/electronic(s) systems; and

b. the application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of electrical/electronic systems.

c. the ability to analyze, design, and implement one or more of the following: control systems, instrumentation systems, communications systems, computer systems, or power systems;

d. the ability to apply project management techniques to electrical/electronic(s) systems; and

e. the ability to utilize differential and integral calculus, as a minimum, to characterize the performance of electrical/electronic systems.

f. the application of electric circuits, computer programming, associated software applications, analog and digital electronics, microcomputers, operating systems, local area networks, and engineering standards to the building, testing, operation, and maintenance of computer systems and associated software systems; and

g. the application of natural sciences and mathematics at or above the level of algebra and trigonometry to the building, testing, operation, and maintenance of computer systems and associated software systems.

h. the ability to analyze, design, and implement hardware and software computer systems;

i. the ability to apply project management techniques to computer systems; and

j. the ability to utilize statistics/probability, transform methods, discrete mathematics, or applied differential equations in support of computer systems and networks.

ECET Enrollment and Degrees Awarded

	Academic Year		Enrollment Year					Total Undergrad	Degrees Awarded
			1st	2nd	3rd	4th	5th		Bachelors
Current Year	2021	FT	25	26	72	78		201	70
		PT	3	8	14	23		48	
1	2020	FT	23	43	76	74		216	56
		PT	1	1	12	23		37	
2	2019	FT	25	39	54	71		189	61
		PT	2	11	27	32		72	
3	2018	FT	19	23	57	61		160	47
		PT	1	3	23	22		49	
4	2017	FT	9	30	46	50		135	47
		PT	3	10	26	33		72	