ABET Surveying Engineering Technology

Accreditation

The New Jersey Institute of Technology program in Surveying Engineering Technology (SET) is accredited by the Engineering Technology Accreditation Commission of ABET, www.abet.org.

SET Program Educational Objectives

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

(1) Graduates will gain requisite experience to become licensed surveyors, survey technologists, and/or GIS specialists.

(2) Graduates will take on increasing responsibilities and supervisory roles in their firms. Some graduates may start their own surveying practice.

(3) Graduates will apply and expand upon their undergraduate-level surveying preparation through involvement in organizations dedicated to the advancement of the surveying profession, geospatial knowledge and technology.

SET Student Outcomes

Students from the SET 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.

SET Program Criteria

The following are the SET Program Criteria:

a. Mathematical concepts to support analyses of advanced surveying/geomatics problems.

b. Historical elements of land ownership, particularly where surveying/geomatics are an integral part.

c. Data science and analysis for conformance of precision/accuracy and blunder/error detection.

d. Data structure/format, storage/management, publication/visualization and the related legal responsibilities to the public.

e. Modern measurement and design technologies necessary to model, construct, or locate features above, below or on the Earth's surface.

f. Additional material from a minimum of four subject areas below, consistent with the program's educational objectives:

- boundary surveying
- engineering surveys
- photogrammetry and remote sensing
- geodesy
- cartography including map projections and coordinate systems
- geospatial data science
- drainage and roadway design

SET Enrollment and Degrees Awarded

	Academic Year		Enrollment Year 1st	2nd	3rd	4th	5th	Total Undergrad	Degrees Awarded Bachelors
Current Year	2021	FT	1	2	1	2		6	4
		PT	1	2	6	12		21	
1	2020	FT	3		2	4		9	6
		PT		4	8	10		22	
2	2019	FT	2	2	1	4		9	12
		PT			10	11		21	
3	2018	FT	1		3			4	9
		PT	1	4	9	11		25	
4	2017	FT		1	3	3		7	6
		PT	2	2	3	14		21	