

B.S. in Surveying Engineering Technology

(120 credits minimum)

First Year

1st Semester		Credits
MATH 138	General Calculus I	3
SDET 101 or CS 106	Fundamentals of Software and Data Technologies ¹ or Introduction to Computing	3
ENGL 101	English Composition: Introduction to Academic Writing	3
PHYS 102	General Physics I	3
PHYS 102A	General Physics I Lab	1
MET 103	Introduction to Engineering Technology Design	2
ET 101	Introduction to Engineering Technology	0
FYS SEM	First-Year Student Seminar	0
Term Credits		15

2nd Semester

MATH 238	General Calculus II	3
ENGL 102	English Composition: Introduction to Writing for Research	3
ACCT 117	Principles Of Fin Accountng	3
MET 105	Applied Computer Aided Design	2
Technical Elective		3
Term Credits		14

Second Year**1st Semester**

SET 200	Introduction To Geomatics	2
SET 200A	Introduction to Geomatics Lab	1
MGMT 290	Business Law I	3
Scientific Literacy GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/)		3
Technical Elective		3
Free Elective		3
Term Credits		15

2nd Semester

SET 207	Evidence and Procedures for Property Surveys	3
MIS 245	Introduction to Management Information Systems	3
Social Science Literacy GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/social-science-ger/)		3
History and Humanities GER 200 level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/)		3
Technical Elective		3
Term Credits		15

Third Year**1st Semester**

SET 307	Boundaries and Adjacent Properties	3
CET 322	Construction Codes and Regulations	3
CET 317	Construction Computing	3
CET 313	Principles of Heavy Highway Construction	3
SET 301	Route Surveying	3
Term Credits		15

2nd Semester

ENGR 303	Photogrammetry and Aerial Photo Interpretation	3
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SET 304	Adjustment Computations I	3
MATH 305	Statistics for Technology	3
CET 340	Land Development	3
COM 313	Technical Writing	3
Term Credits		15
Fourth Year		
1st Semester		
SET 400	Digital Surveying Methods	3
SET 401	Fundamentals Of Geodesy	3
ENGR 440	Geographic/Land Information Systems	3
History and Humanities GER 300+ level (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/)		3
Technical Elective		3
Term Credits		15
2nd Semester		
CET 413	Environmental Science	3
SET 407	Boundary Line Analysis	4
SET 490	Senior Project in Surveying	3
Humanities and Social Science Senior Seminar GER (http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone/)		3
Technical Elective		3
Term Credits		16
Total Credits		120

Approved Technical Electives

Code	Title	Credits
CET 314	Principles of Building Construction	3
ENGR 215	Raster-based Geographic Information System	3
ENGR 320	Prototyping Essentials	3
ENGR 330	Applications of Microcontrollers and IoT devices	3
ENGR 340	Vector-based Geographic Information System	3
ENGR 405	Reality Capture of the Built Environment	3
ENGR 420	Remote Sensing of the Environment	3
ENGR 423	Drone Science Fundamentals	3
ENGR 424	Robotics Science Fundamentals	3
ENGR 433	Remote Sensing Digital Image Processing	3
ENGR 480	Hydrographic Mapping	3
IS 265	Introduction to Information Systems	3
MET 235	Statics for Technology	3
MET 237	Strength of Materials for Technology	3
SDET 102	Applications of Software Engineering Technology	3
SDET 201	Data Engineering	3

MATH 107/108/110 cannot be used to satisfy any technical electives.

¹ This Computing Literacy GER can be satisfied with any course from this link: [linkurl^/undergraduate/academic-policies-procedures/general-education-requirements/computer-science-ger/Computing Literacy GER](http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/computer-science-ger/Computing%20Literacy%20GER).

This curriculum represents the maximum number of credits per semester for which a student is advised to register. A full-time credit load is 12 credits. First-year students are placed in a curriculum that positions them for success which may result in additional time needed to complete curriculum requirements. Continuing students should consult with their academic advisor to determine the appropriate credit load.