

# B.S. in Surveying Engineering Technology

(120 credits minimum)

## First Year

1st Semester		Credits
MATH 138	General Calculus I	3
CS 106	Introduction to Computing <sup>1</sup>	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	Engineering Graphics and Intro. to CAD	2
ET 101	Introduction to Engineering Technology	0
FYS SEM	First-Year Student Seminar	0
<b>Term Credits</b>		<b>15</b>

## 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
CIM 101	Introduction to the Concrete Industry	3
MET 105	Applied Computer Aided Design	2
<b>Term Credits</b>		<b>14</b>

## Second Year

### 1st Semester

SET 200	Introduction To Geomatics	2
SET 200A	Introduction to Geomatics Lab	1
Scientific Literacy GER ( <a href="http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/">http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/natural-science-ger/</a> )		3
Technical Elective		3
ACCT 215	Managerial Accounting I	3
SET 207	Evidence and Procedures for Property Surveys	3
<b>Term Credits</b>		<b>15</b>

### 2nd Semester

MGMT 290	Business Law I	3
Social Science Literacy GER ( <a href="http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/social-science-ger/">http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/social-science-ger/</a> )		3
History and Humanities GER 200 level ( <a href="http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/">http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-200-level/</a> )		3
MIS 245	Introduction to Management Information Systems	3
Technical Elective		3
<b>Term Credits</b>		<b>15</b>

## Third Year

### 1st Semester

SET 307	Boundaries and Adjacent Properties	3
CMT 332	Structural Systems for Construction Management	3
CET 317	Construction Computing	3
COM 313	Technical Writing	3
SET 301	Route Surveying	3
<b>Term Credits</b>		<b>15</b>

### 2nd Semester

SET 303	Photogrammetry and Aerial Photo Interpretation	3
SET 304	Adjustment Computations I	3

MATH 305	Statistics for Technology	3
SET 360	Digital Surveying Methods	3
History and Humanities GER 300+ level ( <a href="http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/">http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/ger-300-level/</a> )		3
<b>Term Credits</b>		<b>15</b>
<b>Fourth Year</b>		
<b>1st Semester</b>		
SET 405	Reality Capture of the Built Environment	3
SET 440	Land Development	3
Technical Elective		3
SET 480	Hydrographic Mapping	3
SET 420	Geographic/Land Information Systems	3
<b>Term Credits</b>		<b>15</b>
<b>2nd Semester</b>		
CET 413	Environmental Science	3
SET 401	Fundamentals Of Geodesy	3
SET 407	Boundary Line Analysis	4
SET 490	Senior Project in Surveying	3
Humanities and Social Science Senior Seminar GER ( <a href="http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone/">http://catalog.njit.edu/undergraduate/academic-policies-procedures/general-education-requirements/hss-capstone/</a> )		3
<b>Term Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>120</b>

## Approved Technical Electives

Code	Title	Credits
SET 433	Remote Sensing Digital Image Processing	3
SET 423	Remote Sensing of the Environment	3
SET 320	Vector-based Geographic Information System	3
SET 220	Raster-based Geographic Information System	3
SET 203	Introduction to Remote Sensing Science & Technology	3
CET 313	Construction Procedures I	3
CET 314	Construction Procedures II	3
MET 235	Statics for Technology	3
MET 237	Strength of Materials for Technology	3
ENGR 320	Prototyping Essentials	3
ENGR 330	Applications of Microcontrollers and IoT devices	3
ENGR 423	Drone Science Fundamentals	3
ENGR 424	Robotics Science Fundamentals	3
IS 265	Introduction to Information Systems	3

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

*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.*