

# CIVIL ENGINEERING TECHNOLOGY - BACHELOR OF SCIENCE IN ENGINEERING TECHNOLOGY

## A Suggested Plan of Study for Students

This roadmap assumes student placement in MATH 1511G Calculus and Analytic Geometry I and ENGL 1110G Composition I. The contents and order of this roadmap may vary depending on initial student placement in mathematics and English. It is only a suggested plan of study for students and is not intended as a contract. Course availability may vary from fall to spring semester and may be subject to modification or change.

First Year		
<b>Fall</b>		
ENGL 1110G	Composition I	4
ET 101	Introduction to Engineering Technology and Geomatics	1
ET 154	Construction Methods and Communications	3
ENGR 120	DC Circuit Analysis	4
ENGR 190	Introduction to Engineering Mathematics	4
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ET 109	Computer Drafting Fundamentals	3
MATH 1435 or MATH 1511G	Applications of Calculus I <sup>1</sup> or Calculus and Analytic Geometry I	3-4
CHEM 1120G	Introduction to Chemistry Lecture and Laboratory (non majors)	4
Area III: Lab Sciences (Choose one)		4
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	
<b>Credits</b>		<b>14-15</b>
<b>Second Year</b>		
<b>Fall</b>		
COMM 1115G	Introduction to Communication	3
ET 143	Civil Drafting Fundamentals	3
ENGL 2210G	Professional and Technical Communication Honors	3
ENGR 233	Engineering Mechanics I	3
MATH 1440 or MATH 1521G	Applications of Calculus II <sup>1</sup> or Calculus and Analytic Geometry II	3
<b>Credits</b>		<b>15</b>
<b>Spring</b>		
Area IV: Social Behavior Sciences <sup>2</sup>		3
ET 254	Concrete Technology	3
ET 308	Fluid Technology	3
ET 308 L	Fluid Technology Lab	1
ENGR 234	Engineering Mechanics II	3
SUR 222	Introduction to Geomatics	3
<b>Credits</b>		<b>16</b>

<b>Third Year</b>		
<b>Fall</b>		
Area V: Humanities <sup>2</sup>		3
ET 310	Applied Strength of Materials	3
ET 310 L	Applied Strength of Materials Lab	1
ET 354	Soil and Foundation Technology	4
Viewing a Wider World <sup>3</sup>		3
<b>Credits</b>		<b>14</b>
<b>Spring</b>		
Area VI: Creative and Fine Arts <sup>2</sup>		3
ET 332	Applied Design of Structures I	4
ET 355	Site/Land Development and Layout	3
Surveying Elective Course (from pre-approved list) <sup>4</sup>		3
Technical Elective Course (from pre-approved list) <sup>5</sup>		3
<b>Credits</b>		<b>16</b>
<b>Fourth Year</b>		
<b>Fall</b>		
A ST 311	Statistical Applications	3
ET 432	Applied Design of Structures II	4
ET 459	Construction Technology and Management	3
I E 451	Engineering Economy	3
Technical Elective Course (from pre-approved list) <sup>5</sup>		3
<b>Credits</b>		<b>16</b>
<b>Spring</b>		
ET 410	Senior Seminar	1
ET 412	Highway Technology	3
ET 418	Applied Hydraulics	3
ET 421	Senior Project	3
Technical Elective Course (from pre-approved list) <sup>5</sup>		3
Viewing a Wider World <sup>3</sup>		3
<b>Credits</b>		<b>16</b>
<b>Total Credits</b>		<b>123-124</b>

<sup>1</sup> Students may need to take any prerequisites needed to enter MATH 1511G Calculus and Analytic Geometry I/MATH 1435 Applications of Calculus I or MATH 1521G Calculus and Analytic Geometry II/MATH 1440 Applications of Calculus II before enrolling in either option of coursework.

*\*For students wishing to pursue a technical master's degree, MATH 1511G Calculus and Analytic Geometry I and MATH 1521G Calculus and Analytic Geometry II are recommended and will satisfy both the Area II and General Education Elective requirements. Students who take MATH 1435 Applications of Calculus I and MATH 1440 Applications of Calculus II, will need to have an exception made for their degree audit.*

<sup>2</sup> See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of this catalog for a full list of courses

<sup>3</sup> See the Viewing a Wider World (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext>) section of this catalog for a full list of courses

<sup>4</sup> **Surveying Electives:** SUR 328 Construction Surveying & Automation Technologies, SUR 351 Spatial Data Adjustment I, or SUR 361 Geodesy/Geodetic Control Surveying

<sup>5</sup> **Technical Elective Courses:** E T 381 Renewable Energy Technologies, E T 382 Solar Energy Technologies, E T 384 Wind and Water Energy Technologies, E T 386 Sustainable Construction and Green Building Design, E T 472 Intelligent Transportation Systems (ITS), E T 480

2 Civil Engineering Technology - Bachelor of Science in Engineering Technology

Innovation and Product Development, and any SUR 300+ (in addition to the required Surveying Elective).