CIVIL ENGINEERING TECHNOLOGY - BACHELOR OF SCIENCE IN ENGINEERING TECHNOLOGY (ONLINE)

The **Civil Engineering Technology** (CET) program at NMSU prepares graduates with the technical and managerial skills necessary to enter careers in planning, designing, constructing, and operating the built environment and global infrastructure. Graduates with the baccalaureate degree have strengths in their knowledge of design, construction, testing, and operation of buildings and infrastructure, with the ability to produce and utilize construction documents, analyze and design systems, specify project methods and materials, perform cost estimates and analyses, and manage technical activities in support of civil projects. **Graduates from our ABET-accredited CET program can pursue professional licensure and become professional engineers.**

The CET 2+2 roadmap assumes that students have completed all lower-division General Education and foundational coursework (or equivalents) before beginning upper-division CET classes. Some foundational courses may be completed concurrently with upper-division work, though this may extend time to graduation. Students should consult with their academic advisor to confirm transfer, substitution, or course availability options. Viewing a Wider World (VWW) requirements are completed during the final two years at NMSU.

The **Civil Engineering Technology** program is accredited by the Engineering Technology Accreditation Commission of ABET, https://www.abet.org (https://www.abet.org/), under the commission's General Criteria and Program Criteria for Civil Engineering Technology and Similarly Named Programs.

Types of jobs that graduates pursue in this field:

- Civil Engineer
- Construction Manager
- Project Engineer
- Project Manager
- Design Engineer
- Construction Inspector
- Owner
- Estimator
- Distribution and Sales

Civil Engineering Technology- (No Concentration)

Students must complete all University degree requirements, which include General Education requirements, Viewing a Wider World requirements, and elective credits to total at least 120 credits with 48 credits in courses numbered 300 or above. Developmental coursework will not count towards the degree requirements and/or elective credits but may be needed to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education		
Area I: Communications [2]		*10*
English Composition - Level 1		
ENGL 1110G	Composition I	
or ENGL 1110H	Composition I Honors	
English Composition - Level 2		
ENGL 2210G	Professional and Technical Communication	
or ENGL 2210H	Professional and Technical Communication	
Oral Communication		
COMM 1115G	Introduction to Communication	
or HNRS 2175G	Introduction to Communication Honors	
Area II: Mathematics [1]		*4*
MATH 1511G	Calculus and Analytic Geometry I	
or MATH 1511H	Calculus and Analytic Geometry I Honors	
Area III: Laboratory Sciences		*8*
CHEM 1120G	Introduction to Chemistry Lecture and Laboratory (non majors)	
or GEOL 1110G	Physical Geology	
Choose one sequence from the following for four credits:		
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	
or PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	
Area IV: Social/Behavioral Sciences [2]		*3*
Area V: Humanities [2]		*3*
Area VI: Creative and Fine Arts [2]		*3*
General Education Elective [1]		*4*
MATH 1521G	Calculus and Analytic Geometry II	
or MATH 1521H	Calculus and Analytic Geometry II Honors	
Viewing A Wider World [3]		*6*
Courses must be taken from two different colleges, one being from the College of Business		
Departmental/College Requirements		
The foundational topics listed below, may be eligible for transfer credit. If not completed before transfer to NMSU, consider the listed courses to meet program requirements. [4]		
Statistics Foundations Course (Such as A ST 311 or MATH 1350G)		3
Introduction to Engineering Technology (such as E T 101)		1
Introduction to Surveying or Geomatics (such as SUR 222)		3
Drafting & Construction Applications, in the following topics:		9
Computer Drafting Fundamentals (Such as E T 109)		
Civil/Survey Drafting I (Such as E T 143)		
Construction Methods and Communications (Such as E T 154)		
Electrical Science Foundations (Such as ENGR 120 or PHYS 1240G or PHYS 1320G)		3-4
Engineering Mathematics Prep (Such as ENGR 190)		4
Required CET-Specific Courses		
E T 254	Concrete Technology	3
E T 308	Fluid Technology	3
E T 308 L	Fluid Technology Lab	1
E T 310	Applied Strength of Materials	3
E T 310 L	Applied Strength of Materials Lab	1
E T 332	Applied Design of Structures I	4
E T 354	Soil and Foundation Technology	4
E T 355	Site/Land Development and Layout	3
E T 410	Senior Seminar	1
E T 412	Highway Technology	3

E T 418	Applied Hydraulics	3
E T 421	Senior Project	3
E T 432	Applied Design of Structures II	4
E T 459	Construction Technology and Management	3
ENGR 233	Engineering Mechanics I	3
ENGR 234	Engineering Mechanics II	3
I E 451	Engineering Economy	3
Upper-Level Geomatics/Surveying Elective (choose 1 course from the list below)		*3*
SUR 328 & 328L	Construction Surveying & Automation Technologies and Construction Surveying & Automation Technologies Lab	
SUR 351	Spatial Data Adjustment I	
SUR 361	Geodesy/Geodetic Control Surveying	
Technical Electives [5]		*6*
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 420	Engineering Internship [5]	
E T 472	Intelligent Transportation Systems (ITS) (Available Online)	
ENGR 400 (Choose 3 credits of those related to the field) [5]		
Upper-Level Surveying (SUR) courses 300+		
Second Language: (not required)		
Electives, to bring the total credits to 120		**0**
Total Credits		**121-122**

1. Students may need to take any prerequisites needed before enrolling in MATH 1511G Calculus and Analytic Geometry I or MATH 1521G Calculus and Analytic Geometry II. These courses satisfy both the Area II and General Education Elective requirements.
2. See the General Education (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/) section of the catalog for a full list of courses
3. See the Viewing a Wider World (https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/#viewingawiderworldtext) section of the catalog for a full list of courses
4. Lower-division courses listed in this section reflect the first two years of the 2+2 program and may be taken at another accredited institution, including during summer sessions, if approved in advance. Students should consult with their faculty advisor when registering for these courses in or outside of the institution.
5. Verify with your faculty advisor for pre-approval of ENGR 400 Special Topics that are related to the field and for discussion of E T 420 Engineering Internship limitations and specifications.