

ELECTRICAL ENGINEERING TECHNOLOGY - BACHELOR OF SCIENCE IN ENGINEERING TECHNOLOGY

The Electrical Engineering Technology (<https://et.nmsu.edu/>) (EET) program combines engineering theory and real-world industrial knowledge for the design, implementing, and testing of a wide range of innovative electrical and electronic circuits and systems. The EET program includes courses in analog electronics, digital systems, computer programming, embedded systems, renewable energy, power systems, instrumentation, automated control systems, microprocessors, computer networking, signal processing, and communications.

Our hands-on program places special emphasis on power technologies and automated manufacturing. EET graduates place into challenging positions in industry, as project engineers, applications engineers, field engineers, test engineers, control engineers, and more!

For ABET accreditation information on this program, refer to: <https://et.nmsu.edu/>.

Electrical 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 in order to take the necessary English and Mathematics coursework.

Prefix	Title	Credits
General Education		
<i>Area I: Communications</i>		
<i>English Composition - Level 1</i>		
ENGL 1110G or ENGL 1110H	Composition I Composition I Honors	4
<i>English Composition - Level 2</i>		
ENGL 2210G or ENGL 2210H	Professional and Technical Communication (Recommended) ² Professional and Technical Communication	3
<i>Oral Communication</i>		
COMM 1115G or HNRS 2175G	Introduction to Communication Introduction to Communication Honors	3
<i>Area II: Mathematics</i>		
MATH 1511G or MATH 1511H	Calculus and Analytic Geometry I ¹ Calculus and Analytic Geometry I Honors	4
<i>Area III: Laboratory Sciences</i>		
Choose a sequence from the following for eight credits: ³		
<i>Algebra-Based Sequence</i>		
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab	
PHYS 1240G & PHYS 1240L	Algebra-Based Physics II and Algebra-Based Physics II Lab	
<i>Calculus-Based Sequence</i>		

PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab	
PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab	
<i>Area IV: Social/Behavioral Sciences</i> ²		3
<i>Area V: Humanities</i> ²		3
<i>Area VI: Creative and Fine Arts</i> ²		3
<i>General Education Elective</i>		
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II ¹ Calculus and Analytic Geometry II Honors	4
Viewing A Wider World ^{2, 4}		6
Departmental/College Requirements		
A ST 311	Statistical Applications	3
E T 101	Introduction to Engineering Technology	1
E T 246	Electronic Devices I	4
E T 272	Electronic Devices II	4
E T 324	Signal Processing and Filtering	4
E T 344	Microprocessor Systems	3
E T 356	Applied Power Technologies I	4
E T 377	Computer Networking I	3
E T 381	Renewable Energy Technologies	3
E T 398	Digital Systems	4
E T 402	Introduction to Automated Control Systems	3
E T 414	Communications Systems	3
ENGR 120	DC Circuit Analysis	4
E T 452	Advanced Automated Control Systems	3
E T 456	Applied Power Technologies II	3
ENGR 130	Digital Logic	4
ENGR 140	Introduction to Programming and Embedded Systems	4
ENGR 190	Introduction to Engineering Mathematics	4
ENGR 230	AC Circuit Analysis	4
ENGR 401	Engineering Capstone I	3
ENGR 402	Engineering Capstone II	3
<i>Technical Electives (choose 3 courses from the list below)</i> ⁴		9
E T 305	Introduction to Product Design	
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	
ICT 477	Computer Networking II	
E T 480	Innovation and Product Development	
E T 483	Mobile App Programming and Development	
ICT 457	Information Security Principles	
ENGR 400	Special Topics (Choose three 1 credit courses related to the field) ⁵	
Second Language: (not required)		
Electives, to bring the total credits to 120		
Total Credits		121

¹ Students may need to take any prerequisites needed before enrolling in MATH 1511G Calculus and Analytic Geometry I and 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/#associatesbachelorsgetext>) section of the catalog for a full list of courses. 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, rules, and alternative options.

³ Students must select one of the two PHYS course sequences, from the following, in order to meet the 8 credits of the Area III: Laboratory Sciences requirement.

Algebra-Based Sequence

- PHYS 1230G Algebra-Based Physics I/PHYS 1230L Algebra-Based Physics I Lab
- PHYS 1240G Algebra-Based Physics II/PHYS 1240L Algebra-Based Physics II Lab

Calculus-Based Sequence

- PHYS 1310G Calculus -Based Physics I/PHYS 1310L Calculus - Based Physics I Lab
- PHYS 1320G Calculus -Based Physics II/PHYS 1320L Calculus - Based Physics II Lab

⁴ Electives offer students the flexibility to explore specialized interests within or beyond their major. By selecting electives strategically, students may also be able to complete a minor with little or no additional coursework beyond degree requirements.

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.