

ELECTRONICS AND COMPUTER 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		
Fall		
COMM 1115G	Introduction to Communication (Area I: Communications) ²	3
E T 101	Introduction to Engineering Technology and Geomatics	1
ENGL 1110G	Composition I (Area I: Communications)	4
ENGR 120	DC Circuit Analysis	4
ENGR 190	Introduction to Engineering Mathematics	4
Credits		16
Spring		
ENGR 130	Digital Logic	4
ENGR 140	Introduction to Programming and Embedded Systems	4
ENGL 2210G	Professional and Technical Communication Honors (Area I: Communications)	3
MATH 1435 or MATH 1511G	Applications of Calculus I (Area II: Mathematics) ¹ or Calculus and Analytic Geometry I	3 - 4
Credits		14-15
Second Year		
Fall		
E T 246	Electronic Devices I	4
ENGR 230	AC Circuit Analysis	4
MATH 1440 or MATH 1521G	Applications of Calculus II ¹ or Calculus and Analytic Geometry II	3 - 4
Physics I with Lab (Area III: Lab Sciences, Choose one) ³		4
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab ³	
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab ³	
Credits		15-16
Spring		
E T 272	Electronic Devices II	4
E T 362	Software Technology II	3
E T 398	Digital Systems	4
Physics II with Lab (Area III: Lab Sciences, from the chosen sequence) ³		4
PHYS 1240G & PHYS 1240L	Algebra-Based Physics II and Algebra-Based Physics II Lab ³	

PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab ³	
Credits		15
Third Year		
Fall		
Area V: Humanities ²		3
E T 324	Signal Processing and Filtering	4
E T 377	Computer Networking I	3
E T 381	Renewable Energy Technologies	3
Technical Elective Course (from pre-approved list) ⁴		3
Credits		16
Spring		
A ST 311	Statistical Applications	3
E T 456	Applied Power Technologies	3
E T 344	Microprocessor Systems	3
Technical Elective Course (from pre-approved list) ⁴		3
Viewing a Wider World ^{2,4}		3
Credits		15
Fourth Year		
Fall		
E T 402	Instrumentation	3
E T 444	Computer Hardware Senior Design	3
ENGR 401	Engineering Capstone I	3
I E 451	Engineering Economy	3
Area VI: Creative and Fine Arts ²		3
Credits		15
Spring		
Area IV: Social Behavior Sciences ²		3
E T 314	Communications Systems I	3
ENGR 402	Engineering Capstone II	3
Technical Elective Course (from pre-approved list) ⁴		3
Viewing a Wider World ^{2,4}		3
Credits		15
Total Credits		121-123

¹ 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.

² 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.

³ 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.

⁴ 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

2 Electronics and Computer Engineering Technology - Bachelor of Science in Engineering Technology

- 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 Concentrations are "*optional*" educational sequences that permit students to focus on particular areas related to their major. Concentrations "*may*" often be done without additional credits by judicious use of electives and other optional course requirements.