

# ELECTRICAL 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		Credits
COMM 1115G or HNRS 2175G	Introduction to Communication <sup>2</sup> or Introduction to Communication Honors	3
ET 101	Introduction to Engineering Technology	1
ENGL 1110G or ENGL 1110H	Composition I or Composition I Honors	4
ENGR 120	DC Circuit Analysis	4
ENGR 190	Introduction to Engineering Mathematics	4
<b>Credits</b>		<b>16</b>
Spring		Credits
ENGR 130	Digital Logic	4
ENGR 140	Introduction to Programming and Embedded Systems	4
ENGL 2210G or ENGL 2210H	Professional and Technical Communication or Professional and Technical Communication	3
MATH 1511G or MATH 1511H	Calculus and Analytic Geometry I <sup>1</sup> or Calculus and Analytic Geometry I Honors	4
<b>Credits</b>		<b>15</b>

### Second Year

Fall		Credits
ET 246	Electronic Devices I	4
ENGR 230	AC Circuit Analysis	4
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II <sup>1</sup> or Calculus and Analytic Geometry II Honors	4
Physics I with Lab (Area III: Lab Sciences, Choose one) <sup>3</sup>		4
PHYS 1230G & PHYS 1230L	Algebra-Based Physics I and Algebra-Based Physics I Lab <sup>3</sup>	4
PHYS 1310G & PHYS 1310L	Calculus -Based Physics I and Calculus -Based Physics I Lab <sup>3</sup>	
<b>Credits</b>		<b>16</b>
Spring		Credits
Area IV: Social Behavior Sciences <sup>2</sup>		3
ET 272	Electronic Devices II	4
ET 398	Digital Systems	4
Physics II with Lab (Area III: Lab Sciences, from the chosen sequence) <sup>3</sup>		4
PHYS 1240G & PHYS 1240L	Algebra-Based Physics II and Algebra-Based Physics II Lab <sup>3</sup>	4

PHYS 1320G & PHYS 1320L	Calculus -Based Physics II and Calculus -Based Physics II Lab <sup>3</sup>	4
<b>Credits</b>		<b>15</b>
Third Year		Credits
Fall		Credits
Area V: Humanities <sup>2</sup>		3
ET 324	Signal Processing and Filtering	4
ET 377	Computer Networking I	3
ET 381	Renewable Energy Technologies	3
Technical Elective Course (from pre-approved list) <sup>4</sup>		3
<b>Credits</b>		<b>16</b>
Spring		Credits
A ST 311	Statistical Applications	3
ET 344	Microprocessor Systems	3
ET 356	Applied Power Technologies I	4
Technical Elective Course (from pre-approved list) <sup>4</sup>		3
Viewing a Wider World <sup>2,4</sup>		3
<b>Credits</b>		<b>16</b>
Fourth Year		Credits
Fall		Credits
Area VI: Creative and Fine Arts <sup>2</sup>		3
Viewing a Wider World <sup>2,4</sup>		3
ET 402	Introduction to Automated Control Systems	3
ET 456	Applied Power Technologies II	3
ENGR 401	Engineering Capstone I	3
<b>Credits</b>		<b>15</b>
Spring		Credits
ET 414	Communications Systems	3
ENGR 402	Engineering Capstone II	3
Technical Elective Course (from pre-approved list) <sup>4</sup>		3
ET 452	Advanced Automated Control Systems	3
<b>Credits</b>		<b>12</b>
<b>Total Credits</b>		<b>121</b>

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> 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

<sup>4</sup> 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.