

MECHANICAL 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
ET 101	Introduction to Engineering Technology and Geomatics	1
ENGL 1110G	Composition I (Area I) ¹	4
ENGR 110	Introduction to Engineering Design	3
ENGR 120	DC Circuit Analysis	4
ENGR 190	Introduction to Engineering Mathematics	4
Credits		16

Spring

Area IV: Social/Behavioral Sciences (see recommended list) ¹		3
CHEM 1120G	Introduction to Chemistry Lecture and Laboratory (non majors)	4
COMM 1115G	Introduction to Communication (Area I)	3
E T 182	Introduction to Digital Logic	2
MATH 1435 or MATH 1511G	Applications of Calculus I ² or Calculus and Analytic Geometry I	3 - 4
Credits		15-16

Second Year

Fall		Credits
ENGR 140	Introduction to Programming and Embedded Systems	4
ENGR 233	Engineering Mechanics I	3
MATH 1440 or MATH 1521G	Applications of Calculus II ² or Calculus and Analytic Geometry II	3 - 4
PHYS 1230G & PHYS 1230L or PHYS 1310G <i>and</i> PHYS 1310L	Algebra-Based Physics I or Calculus -Based Physics I <i>and</i> Calculus - Based Physics I Lab	4
Credits		14-15

Spring

E T 184	Applied AC Circuits	2
E T 210	Advanced 3-D Modeling (Solid Works)	3
E T 217 & 217 L	Manufacturing Processes and Manufacturing Processes Lab	4
ENGR 234	Engineering Mechanics II	3
PHYS 1240G & PHYS 1240L or PHYS 1320G <i>and</i> PHYS 1320L	Algebra-Based Physics II or Calculus -Based Physics II <i>and</i> Calculus - Based Physics II Lab	4
Credits		16

Third Year

Fall		Credits
Area V: Humanities (see recommended list) ¹		3
A ST 311	Statistical Applications	3
E T 306 & 306 L	Fundamental and Applied Thermodynamics and Thermodynamics Lab	4
E T 308 & 308 L	Fluid Technology and Fluid Technology Lab	4
ENGL 2210G	Professional and Technical Communication Honors	3
Credits		17

Spring

E T 305	Introduction to Product Design	3
E T 310 & 310 L	Applied Strength of Materials and Applied Strength of Materials Lab	4
E T 396	Heat Transfer and Applications	3
Technical Elective (from pre-approved list) ⁴		3
Viewing a Wider World (See recommended list) ¹		3
Credits		16

Fourth Year

Fall		Credits
Area VI: Creative and Fine Arts (see recommended list) ¹		3
E T 426	Analysis and Design of Machine Elements	3
ENGR 401	Engineering Capstone I	3
I E 451	Engineering Economy	3
Technical Elective (from pre-approved list) ⁴		3
Credits		15

Spring

E T 402	Instrumentation	3
E T 410	Senior Seminar	1
ENGR 402	Engineering Capstone II	3
Technical Elective (from pre-approved list) ⁴		3
Viewing a Wider World (See recommended list) ¹		3
Credits		13
Total Credits		122-124

¹ See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of this 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 this catalog for a full list of courses.

² 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.*

³ Elective credit may vary based on Math course selection, prerequisites, dual credit, AP credit, double majors, and/or minor coursework. The amount indicated in the requirements list is the amount needed to bring the total to 120 credits and may appear in variable form based on the degree. However students may end up needing to complete more

or less on a case-by-case basis and students should discuss elective requirements with their advisor.

⁴ Concentrations and Minors are 'optional' educational sequences that students may choose to focus in particular areas related to their major. Concentrations and Minors may often be done without additional credits by judicious use of electives and other optional course requirements.