

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	1
ENGL 1110G or ENGL 1110H	Composition I ¹ or Composition I Honors	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 or HNRS 2175G	Introduction to Communication (Area I) or Introduction to Communication Honors	3
ET 182	Introduction to Digital Logic	2
MATH 1511G or MATH 1511H	Calculus and Analytic Geometry I ² or Calculus and Analytic Geometry I Honors	4
Credits		16

Second Year

Fall		Credits
ENGR 140	Introduction to Programming and Embedded Systems	4
ENGR 233	Engineering Mechanics I	3
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II ² or Calculus and Analytic Geometry II Honors	4
PHYS 1230G & PHYS 1230L or PHYS 1310G and PHYS 1310L	Algebra-Based Physics I or Calculus -Based Physics I and Calculus - Based Physics I Lab	4
Credits		15

Spring

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

Third Year

Fall		Credits
A ST 311	Statistical Applications	3
ET 306 & 306 L	Thermodynamics and Laboratory Applications and Thermodynamics Lab	4
ET 308 & 308 L	Fluid Technology and Fluid Technology Lab	4
ET 317	Advanced Manufacturing and Design	3
ENGL 2210G or ENGL 2210H	Professional and Technical Communication or Professional and Technical Communication	3
Credits		17

Spring

ET 305	Introduction to Product Design	3
ET 310 & 310 L	Applied Strength of Materials and Applied Strength of Materials Lab	4
ET 396	Heat Transfer and Applications	3
Area V: Humanities (See recommended list) ¹		3
Viewing a Wider World (See recommended list) ¹		3
Credits		16

Fourth Year

Fall		Credits
ET 402	Introduction to Automated Control Systems	3
ET 426	Analysis and Design of Machine Elements	3
ENGR 401	Engineering Capstone I	3
IE 451	Engineering Economy	3
Technical Elective (from pre-approved list) ⁴		3
Credits		15

Spring

ET 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
Area VI: Creative and Fine Arts (see recommended list) ¹		3
Credits		13
Total Credits		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 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.

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.