

PHYSICS - BACHELOR OF SCIENCE

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. Full-time students are usually required to take at least 15 credits per semester.

First Year

Semester 1		Credits
ENGL 1110G	Composition I ¹	4
MATH 1511G	Calculus and Analytic Geometry I ¹	4
PHYS 1111	Introductory Computational Physics ¹	3
PHYS 2110 & 2110L	Mechanics and Experimental Mechanics ¹	4
PHYS 2111	Supplemental Instruction to PHYS 2110 ¹	1
Credits		16

Semester 2

ENGL 2210G	Professional and Technical Communication ¹	3
MATH 1521G or MATH 1521H	Calculus and Analytic Geometry II ¹ or Calculus and Analytic Geometry II Honors	4
PHYS 2140 & 2140L	Electricity and Magnetism and Electricity & Magnetism Laboratory ¹	4
PHYS 2141	Supplemental Instruction to PHYS 2140 ¹	1
Area IV: Social and Behavioral Science Course ²		3
Credits		15

Second Year

Semester 1

CHEM 1215G or CHEM 1216	General Chemistry I Lecture and Laboratory for STEM Majors ¹ or General Chemistry I Lecture and Laboratory for CHEM Majors	4
MATH 2530G	Calculus III ¹	3
PHYS 2120 & 2120L	Heat, Light, and Sound and Heat, Light, and Sound Laboratory ¹	4
PHYS 2121	Supplemental Instruction to PHYS 2120	1
COMM 1115G	Introduction to Communication	3
Credits		15

Semester 2

CHEM 1225G or CHEM 1226	General Chemistry II Lecture and Laboratory for STEM Majors ¹ or General Chemistry II Lecture and Laboratory for CHEM Majors	4
MATH 3160	Introduction to Ordinary Differential Equations ¹	3
PHYS 315	Modern Physics ¹	3
PHYS 316	Supplemental Instructions to PHYS 315	1
PHYS 325	Intermediate Experimental Physics ¹	3
Area V: Humanities Course ²		3
Credits		17

Third Year

Semester 1

PHYS 451	Intermediate Mechanics I ¹	3
PHYS 461	Intermediate Electricity and Magnetism I ¹	3
PHYS 395	Intermediate Mathematical Methods of Physics ¹	3
VWW: Viewing a Wider World Course ³		3
First Course in Second Language Series		3-4
Credits		15-16

Semester 2

PHYS 462	Intermediate Electricity and Magnetism II ¹	3
PHYS 480	Thermodynamics ¹	3
Area VI: Creative and Fine Arts Course ²		3
VWW: Viewing a Wider World Course ³		3
Next Course in Second Language Series ¹		3-4
Credits		15-16

Fourth Year

Semester 1

PHYS 454	Intermediate Modern Physics I ¹	3
Physics Upper-Division Elective Courses ¹		6
Elective Courses		6
Credits		15

Semester 2

PHYS 455	Intermediate Modern Physics II ¹	3
Advanced Physics Laboratory ¹		3
Elective Courses		6-4
Credits		12-10
Total Credits		120

¹ These courses may have prerequisites and/or co-requisites, and it is the students responsibility for checking and fulfilling all those requirements.

² See the General Education (<https://catalogs.nmsu.edu/nmsu/general-education-viewing-wider-world/>) section of the catalog for a full list of courses.

³ 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.