

# PHYSICS | BACHELOR OF SCIENCE: PHYSICS

## Degree Maps

Course	Title	Hours
<b>Freshman</b>		
<b>Fall</b>		
SGE030 - Math Statistics Discipline Area		
MATH 234	Analytic Geometry and Calculus I <sup>1, GE</sup>	5
SGE010 - English Discipline Area		
SGE020 - Communication Discipline Area		
UNIV 101	Freshman Seminar	1
PHYS 100	Introduction to Physics and Engineering	3
<b>Hours</b>		<b>15</b>
<b>Spring</b>		
SGE070 - Institutionally Designated Area: Personal and Professional Development		
MATH 235	Analytic Geometry and Calculus II	5
SGE010 - English Discipline Area		
PHYS 211	Engineering Physics I	4
PHYS 211L	Engineering Physics I Laboratory	1
<b>Hours</b>		<b>16</b>
<b>Sophomore</b>		
<b>Fall</b>		
SGE050 - Social Behavioral Sciences Discipline Area		
MATH 236	Analytic Geometry and Calculus III	3
PHYS 333	Introduction to Computational Physics	3
PHYS 212	Engineering Physics II	4
PHYS 212L	Engineering Physics II Laboratory	1
PHYS 221	Statics	3
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
CHEM 120 & 120L	University Chemistry I and University Chemistry Laboratory I	5
PHYS 313	Modern Physics	3
MATH 354	Differential Equations	3
PHYS 331	Electronic Circuits	3
<b>Hours</b>		<b>14</b>
<b>Junior</b>		
<b>Fall</b>		
PHYS 332	Analog and Digital Electronics	3
PHYS 620	Mathematics for the Physical Sciences	3
PHYS 632	Electricity and Magnetism	3
PHYS 603	Projects I	1
Directed Electives		
SGE060 - Arts Humanities Discipline Area		
<b>Hours</b>		<b>16</b>
<b>Spring</b>		
PHYS 621	Mechanics	3
PHYS 672	Thermal Physics	3
PHYS 651	Advanced Physics Laboratory I	2
PHYS 603	Projects I	1
MATH 240	Linear Algebra	3
SGE050 - Social Behavioral Sciences Discipline Area		
<b>Hours</b>		<b>15</b>
<b>Senior</b>		
<b>Fall</b>		
Writing & Information Literacy Requirement		
PHYS 654	Advanced Physics Laboratory II	2
PHYS 677	Quantum Mechanics I	3

PHYS 603	Projects I	1
SGE070 - Institutionally Designated Area: Critical Thinking		
PHYS 105	Critical Thinking for Scientists <sup>1, GE</sup>	3
SGE060 - Arts Humanities Discipline Area		
Directed Electives		
<b>Hours</b>		<b>17</b>
<b>Spring</b>		
PHYS 675	Senior Seminar	1
PHYS 652	Optics	3
PHYS 678	Quantum Mechanics II	3
PHYS 603	Projects I	3
<b>Hours</b>		<b>10</b>
<b>Total Hours</b>		<b>120</b>

**Academic Degree Maps** are term-by-term sample course plans that specify milestones, courses, and special requirements that are necessary for facilitating on-time completion. Degree Maps are *examples* and are not prescriptive. Individualized choices such as concentration options, transfer credits, optional minors, advisory programs (certificates), etc. can alter the recommended coursework. Course offerings are subject to change. Students should consult with their academic advisors for additional guidance on course planning.

To determine courses to take in the directed choices (often listed as Program Elective Course) and directed elective course blocks see the overview tab for courses. To locate approved courses in General Education areas (Undergraduate Programs) see the general education section (<https://catalog.fhsu.edu/general-education/>) of the catalog.

The undergraduate course maps typically advise the most efficient route for students to complete the general education requirements. Courses that are required in the major may be listed as fulfilling relevant general education requirements. This will result in more open elective course hours in some maps than is listed on the degree overview page.