

# PHYSICS (B.S.) - RESIDENT

**Important:** This degree plan is effective for those starting this degree program in fall 2026 through summer 2027. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations, or cognates.

## General Education/Foundational Skills Requirements

Code	Title	Hours
<b>Communication &amp; Information Literacy</b> <sup>1</sup>		
ENGL 101	Composition and Rhetoric	3
	Communications Elective	3
	Information Literacy Elective	3
	Information Literacy Elective	3
<b>Technological Solutions &amp; Quantitative Reasoning</b> <sup>1</sup>		
UNIV 101	Foundational Skills	1
	Math Elective MATH 114 or higher	3
	Technology Competency <sup>2</sup>	0-3
<b>Critical Thinking</b> <sup>1</sup>		
RLGN 105	Introduction to Biblical Worldview <sup>3</sup>	2
	Critical Thinking Elective	3
<b>Civic &amp; Global Engagement</b> <sup>1</sup>		
EVAN 101	Evangelism and the Christian Life <sup>3</sup>	2
	Cultural Studies Elective	3
<b>Social &amp; Scientific Inquiry</b> <sup>1</sup>		
	Natural Science Elective	3
	Social Science Elective	3
<b>Christianity &amp; Contexts</b> <sup>1</sup>		
BIBL 105	Old Testament Survey	2
BIBL 110	New Testament Survey	2
THEO 201	Theology Survey I <sup>3</sup>	2
THEO 202	Theology Survey II <sup>3</sup>	2
<b>Total Hours</b>		<b>40-43</b>

<sup>1</sup> Refer to the list of approved general education electives before enrolling in foundational skill requirements

<sup>2</sup> All students must pass the Computer Assessment OR complete applicable INFT course

<sup>3</sup> Students transferring in 45 or more UG credit hours will have the requirements of RLGN 105 and EVAN 101 waived; Students transferring in 60 or more UG credit hours will also have the requirements of THEO 201 and THEO 202 waived

## Major Requirements

Code	Title	Hours
<b>Major Foundational Courses</b>		
MATH 131	Calculus and Analytic Geometry I <sup>1</sup>	4
PHYS 231	University Physics I <sup>1</sup>	4
<b>Total Hours</b>		<b>8</b>

<sup>1</sup> Courses may also fulfill select General Education Requirements. Please refer to the list of approved general education electives at <https://www.liberty.edu/gened>.

Code	Title	Hours
<b>Major Courses</b>		
MATH 132	Calculus and Analytic Geometry II	4
MATH 221	Applied Linear Algebra	3
MATH 231	Calculus and Analytical Geometry III	4
MATH 334	Differential Equations	3
PHYS 232	University Physics II	4
PHYS 305	Introduction to Modern Physics	3
PHYS 310	Numerical Methods in Physics	3
PHYS 321	Mechanics	3
PHYS 331	Electricity and Magnetism	3
PHYS 432	Thermodynamics and Statistical Mechanics	3
PHYS 433	Quantum Physics	3
PHYS 440	Wave Optics	4
PHYS 491	Physics Capstone	3
<b>Total Hours</b>		<b>43</b>

Code	Title	Hours
<b>Free Electives</b>		
	Choose 32-35 credit hours of Free Electives	32-35
<b>Total Hours</b>		<b>32-35</b>

*All applicable prerequisites must be met*

## Graduation Requirements

- 120 Total hours
- 2.0 Overall grade point average
- 30 Hours must be upper-level courses (300-400 level)
- **Grade of 'C'** Minimum required for all major foundational courses and all upper-level courses in the major
- 25% Of major taken through Liberty University
- 30 Hours must be completed through Liberty University
- **Grad App** Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date

## Course Sequence

<b>Freshman Year</b>		Hours
<b>First Semester</b>		
	Math Elective <sup>1</sup>	4
	Communications Elective <sup>1</sup>	3
BIBL 105	Old Testament Survey	2
ENGL 101	Composition and Rhetoric	3
UNIV 101	Foundational Skills	1
<b>Hours</b>		<b>13</b>
<b>Second Semester</b>		
	Information Literacy Elective <sup>1</sup>	3
	Technology Competency <sup>2</sup>	0-3
BIBL 110	New Testament Survey	2

RLGN 105	Introduction to Biblical Worldview	2
MATH 132	Calculus and Analytic Geometry II	4
Elective		3
<b>Hours</b>		<b>14-17</b>

**Sophomore Year****First Semester**

Critical Thinking Elective <sup>1</sup>		3
Natural Science Elective <sup>1</sup>		4
EVAN 101	Evangelism and the Christian Life	2
MATH 231	Calculus and Analytical Geometry III	4
THEO 201	Theology Survey I	2
Elective		2
<b>Hours</b>		<b>17</b>

**Second Semester**

Cultural Studies Elective <sup>1</sup>		3
Information Literacy Elective <sup>1</sup>		3
PHYS 232	University Physics II	4
THEO 202	Theology Survey II	2
Elective		3
<b>Hours</b>		<b>15</b>

**Junior Year****First Semester**

Social Science Elective <sup>1</sup>		3
MATH 221	Applied Linear Algebra	3
MATH 334	Differential Equations	3
PHYS 305	Introduction to Modern Physics	3
Elective		3
<b>Hours</b>		<b>15</b>

**Second Semester**

PHYS 310	Numerical Methods in Physics	3
PHYS 321	Mechanics	3
PHYS 331	Electricity and Magnetism	3
Elective		3
Elective		3
<b>Hours</b>		<b>15</b>

**Senior Year****First Semester**

PHYS 432	Thermodynamics and Statistical Mechanics	3
PHYS 433	Quantum Physics	3
PHYS 440	Wave Optics	4
Elective		3
Elective		3
<b>Hours</b>		<b>16</b>

**Second Semester**

PHYS 491	Physics Capstone	3
Elective		3
Elective		3
Elective		3

Elective	3
<b>Hours</b>	<b>15</b>
<b>Total Hours</b>	<b>120-123</b>

<sup>1</sup> Refer to the list of approved general education electives at <https://www.liberty.edu/gened> before enrolling in foundational skills requirements.

<sup>2</sup> All students must pass the Computer Assessment OR complete applicable INFT course; refer to <https://www.liberty.edu/computerassessment> for more information.

*All applicable prerequisites must be met*