

# Physics

## Degree Type

Bachelor of Science

**Administrator:** Chair, Department of Physics and Engineering

**Requirements:** 59 credits

## Required Courses:

Item #	Title	Credits
PHYS2110	Physics for Science and Engineering I	3
PHYS2110L	Physics for Science and Engineering I Laboratory	1
PHYS2120	Physics for Science and Engineering II	3
PHYS2120L	Physics for Science and Engineering II Laboratory	1
PHYS3130	Modern Physics	3
PHYS3130L	Modern Physics Laboratory	1
PHYS3410	Analytic Mechanics	3
PHYS3500	Statistical Analysis for Physics and Engineering	3
PHYS4610	Electromagnetics	3
PHYS4720	Solid State Physics	3
PHYS4810	Fundamentals of Quantum Mechanics	3
PHYS4970	Research	1
PHYS4980	Senior Seminar/Capstone	1
ENGR1100	Engineering Software Skills	3
ENGR2310	Instrumentation and Measurements Laboratory	1
CHEM2230	General Chemistry for Engineering Students	3
CHEM2230L	General Chemistry for Engineering Students Laboratory	1
CHEM3510	Thermodynamics and Kinetics	3
MATH2510	Calculus I	4
MATH2520	Calculus II	4
MATH3530	Calculus III	4
MATH3540	Differential Equations	4
MATH3560	Numerical Analysis	3

PHYS4980 must be taken at Northwest Nazarene University.

In addition, students must take the Physics Major Field Examination in their last semester before graduation.

# Accelerated Master of Engineering Pathway

NNU undergraduate students wishing to begin coursework toward a Master of Science degree the final year of their bachelor's degree program have the following options. NNU in collaboration with Boise State University (BSU), works with its students to apply for an accelerated master's degree program at BSU. This accelerated program gives bachelor's degree students a "fast-track" option to pursue their Master of Science degree at BSU. Upon successful completion of this 4+1 model, the student will have earned a Bachelor of Science degree from NNU and the potential of completing BSU's Master of Science (MS) in Computer Science, in Materials Science and Engineering, in Mechanical Engineering, in Electrical and Computer Engineering, or in Electrical and Computer Engineering with a semiconductor emphasis.

Prior to their final year in their bachelor's program, NNU students must apply by April 30 for admission to BSU's Accelerated Master of Science program. Students must also apply to NNU's graduate program as a non-degree seeking student.

Students who have been accepted into the BSU program will be able to apply two NNU graduate courses to the BSU Master of Science degree as well as their NNU Bachelor of Science degree. Students admitted into NNU's graduate program may choose to take additional 4000-level courses at the 5000-level.

Bachelor of Science in Engineering Courses		CR	Approved Graduate Level Courses		CR
<a href="#">PHYS4720</a>	Solid State Physics	3	<a href="#">PHYS5720</a>	Solid State Physics	3
<a href="#">PHYS4810</a>	Fundamentals of Quantum Mechanics	3	<a href="#">PHYS5810</a>	Fundamentals of Quantum Mechanics	3

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**Total Credits**

**59**

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