Morris Campus

Physics B.A.

Division of Science & Mathematics - Adm

Division of Science and Mathematics

- Program Type: Baccalaureate
- Requirements for this program are current for Fall 2015
- Required credits to graduate with this degree: 120
- Required credits within the major: 58
- Degree: Bachelor of Arts

Objectives--The physics program is designed to help students understand the concepts of classical and modern physics while also developing their ability to solve quantitative problems in these areas. It provides the opportunity for students to acquire the skills necessary to perform experimental work. The program develops students' ability to communicate, in form and content, both orally and in writing, the results of scientific work.

The physics program offers a background suitable for students planning to pursue graduate study or careers in industry, research, or teaching. It also provides a solid foundation for any career requiring analytical reasoning.

Program Delivery

This program is available:

- via classroom (the majority of instruction is face-to-face)

Admission Requirements

For information about University of Minnesota admission requirements, visit the Office of Admissions website.

General Requirements

All students are required to complete general University and college requirements. For more information, see the general education requirements.

Program Requirements

Students are required to take 2 semester(s) of any second language.

Courses may not be taken S-N. A minimum GPA of 2.00 is required in the major to graduate. The GPA includes all, and only, University of Minnesota coursework. Grades of F are included in GPA calculation until they are replaced. No grades below C- are allowed.

Required Courses

MATH 1101 - Calculus I [M/SR] (5.0 cr)
MATH 1102 - Calculus II [M/SR] (5.0 cr)
MATH 2101 - Calculus III [M/SR] (4.0 cr)
MATH 2401W - Differential Equations [M/SR] (4.0 cr)
PHYS 1101 - General Physics I [SCI-L] (5.0 cr)
PHYS 1102 - General Physics II [SCI-L] (5.0 cr)
PHYS 2101 - Modern Physics [SCI-L] (4.0 cr)
PHYS 3101 - Classical Mechanics [SCI] (4.0 cr)
PHYS 4101 - Electromagnetism (4.0 cr)
PHYS 4201 - Quantum Mechanics (4.0 cr)
PHYS 4901 - Senior Thesis I (1.0 cr)
PHYS 4902 - Senior Thesis II (1.0 cr)

Elective Courses

Take 12 or more credit(s) from the following:

Group 1 Electives

Take 6 or more credit(s) from the following:

- PHYS 3003 - Computer Modeling of Materials [SCI] (2.0 cr)
- PHYS 3151 - Solid State Physics (2.0 cr)
- PHYS 3152 *{Inactive}*(2.0 cr)
- PHYS 3153 *{Inactive}*(2.0 cr)
- PHYS 3401 - Experimental Physics [SCI-L] (4.0 cr)

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- PHYS 3501 - Statistical Physics [SCI] (4.0 cr)

•Group 2 Electives

Take 0 or more credit(s) from the following:

- PHYS 2201 - Circuits and Electronic Devices [SCI-L] (4.0 cr)
- PHYS 3004 - Atmospheric Physics [ENVT] (4.0 cr)
- PHYS 3301 - Optics (4.0 cr)
- PHYS 3993 - Directed Study (1.0 - 5.0 cr)
- PHYS 4993 - Directed Study (1.0 - 5.0 cr)

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