

PHYSICS/ASTRONOMY (AS)

Associate of Science

Transfer Program

Interest Areas:












Science, Tech., Engr. and Math

Physics is the science that deals with matter and energy and their interactions in selected fields such as mechanics, acoustics, and electricity. A strong background in science and mathematics is important preparation for a college physics program.

Completion of the following courses results in an associate's degree with an area of emphasis in Physics. The required coursework normally fulfills the first half of baccalaureate degree requirements in Physics. Course selection should be tailored to match requirements defined by intended transfer institutions.

Program Website (https://www.nic.edu/programs/viewprogram.aspx?program_id=67)

Program Requirements

Code	Title	Credits
General Education Requirements		
GEM 1 - Written Communication		6
GEM 2 - Oral Communication		3
GEM 3 - Mathematical Ways of Knowing ¹		0
GEM 4 - Scientific Ways of Knowing ¹		0
GEM 5 - Humanistic and Artistic Ways of Knowing		6
GEM 6 - Social and Behavioral Ways of Knowing		6
GEM 7 - Institutionally Designated		4-6
Program Requirements		
CHEM-111	Principles of General College Chemistry I   	5
CHEM-112	Principles of General College Chemistry II   	5
MATH-170	Analytic Geometry and Calculus I   	4
MATH-175	Analytic Geometry and Calculus II	4
MATH-275	Analytic Geometry and Calculus III	4
MATH-335	Linear Algebra	3
MATH-370	Introductions to Ordinary Differential Equations	3
PHYS-211	Engineering Physics I  	5
PHYS-212	Engineering Physics II	5
Total Credits		63-65

¹ This General Education Requirement is met by the Program Requirements.

Course Key



GEM



WCHE



AAS
Institutionally
Designated



Gateway



Milestone

Program Outcomes

Upon completion of the program, students will be able to:

- Apply foundational knowledge and models of a natural or physical science to analyze and/or predict phenomena.
- Interpret and communicate scientific information via written, spoken and/or visual representations.
- Describe the relevance of specific science principles to the human experience.
- Form and test a hypothesis in the laboratory, classroom or field using discipline specific tools and techniques for data collection and/or analysis.
- Demonstrate the ability to explain observations and relate these to scientific theory.
- Create a coherent narrative utilizing physics/science principles to describe basic physical processes.

In addition to the program outcomes, students will meet the North Idaho College General Education (GEM) Requirements.