



All students must complete all REACH and program requirements and earn a minimum of 121 credits to qualify for Commencement exercises. All prerequisites must be completed with a grade of C or better. Students must earn a 2.5 GPA or higher in required major and cognate courses and labs.

PHYSICS | MAJOR REQUIREMENTS (15 courses; 50-51 credits)

Departmental Core (9 courses; 28 credits)

- PHYS 200 Freshman Physics Seminar (1)
- PHYS 201/203 General Physics I & Lab (4)
- PHYS 202/206 General Physics II & Lab (4)
- PHYS 310/311 Modern Physics & Lab (4)
- PHYS 330 Thermal Physics (3)
or CHEM 341 Physical Chemistry I (3)
- PHYS 335 Optics (3)
- PHYS 350 Mechanics I (3)
- PHYS 360 Electromagnetism (3)
- PHYS 450 Senior Research Project (3)

Major Elective Courses (1 courses; 3-4 credits)

Choose one additional courses from PHYS at the 300-level or higher. CHEM or MATH may also be used with permission.

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Cognate Courses (5 courses; 19 credits)

- MATH 170 Calculus I (4)
- MATH 171 Calculus II (4)
- MATH 240 Differential Equations (3)
- CHEM 121/122 General Chemistry I & Lab (4)
- CHEM 131/132 General Chemistry II & Lab (4)

REACH CURRICULUM (15 courses; 40-41 credits)

The Freshman Experience

- iMU101 Introduction to Mercyhurst (1)
- iMU102 Involvement at Mercyhurst (1)
- COMP120 Research and Writing (3)

outREACH

- BTG 300 Beyond the Gates (1)

The Senior Experience

- ETH 400 REACH Capstone Ethics (3)

Free Electives

- _____
- _____
- _____
- _____
- _____
- _____

R: Reason and Faith (CST, PHIL, RLST)

- _____
- _____

E: Expression and Creativity (ENG and ART, DANC, MUS, THEA)

- _____
- _____

A: Analytic Thought (MATH, STAT and BIO, CHEM, GEOL, PHYS, SCI)

- _____
- _____

C: Contexts and Systems (ECON, HIS, POLI)

- _____
- _____

H: Humans in Connection (ANTH, PSYC, SOC, WL)

- _____
- _____



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Year	Major Requirements	REACH Curriculum	Elective Courses	Credits
Freshman Fall	<ul style="list-style-type: none"> MATH 170 Calculus I (4) PHYS 200 Freshman Physics Seminar (1) PHYS 201/203 General Physics I & Lab (4) 	<ul style="list-style-type: none"> iMU 101 Introduction to Mercyhurst (1) (Mini 1) COMP 120 Research and Writing (3) 	<ul style="list-style-type: none"> Elective choice (3) 	16+
Freshman Spring	<ul style="list-style-type: none"> MATH 171 Calculus II (4) PHYS 202/206 General Physics II and Lab (4) 	<ul style="list-style-type: none"> iMU 102 Involvement at Mercyhurst (1) (Mini 3) REACH course of your choice (3) 	<ul style="list-style-type: none"> Elective choice (3) 	15+
Sophomore Fall	<ul style="list-style-type: none"> MATH 240 Differential Equations (3) CHEM 121/122 General Chemistry I & Lab (4) 	<ul style="list-style-type: none"> REACH course of your choice (3) REACH course of your choice (3) – BTG 300 <i>Beyond the Gates</i> (1) works well this semester – Study Abroad works well this semester 	<ul style="list-style-type: none"> Elective choice (3) 	16+
Sophomore Spring	<ul style="list-style-type: none"> PHYS 310/311 Modern Physics & Lab (4) CHEM 131/132 General Chemistry II & Lab (4) 	<ul style="list-style-type: none"> REACH course of your choice (3) BTG 300 <i>Beyond the Gates</i> (1) works well this semester Study Abroad works well this semester 	<ul style="list-style-type: none"> Elective choice (3) 	14+
Junior Fall	<ul style="list-style-type: none"> PHYS 330 Thermal Physics (3) or CHEM 341 Physical Chemistry PHYS 335 Optics (3) or PHYS 350 Mechanics I (3) 	<ul style="list-style-type: none"> REACH course of your choice (3) 	<ul style="list-style-type: none"> Elective choice (3) Elective choice (3) 	15+
Junior Spring	<ul style="list-style-type: none"> PHYS 360 Electromagnetism Major Elective Course (3) 	<ul style="list-style-type: none"> REACH course of your choice (3) REACH course of your choice (3) 	<ul style="list-style-type: none"> Elective choice (3) 	15+
Senior Fall	<ul style="list-style-type: none"> PHYS 350 Mechanics I (3) or PHYS 335 Optics (3) Major Elective Course (3) 	<ul style="list-style-type: none"> ETH400 Capstone Ethics (3) <i>must be taken during Senior year</i> REACH course of your choice (3) 	<ul style="list-style-type: none"> Elective choice (3) 	15+
Senior Spring	<ul style="list-style-type: none"> PHYS 450 Senior Research Project (3) 	<ul style="list-style-type: none"> ETH400 Capstone Ethics (3) <i>must be taken during Senior year</i> 	<ul style="list-style-type: none"> Elective choice (3) Elective choice (3) Elective choice (3) 	15+

TOTAL CREDITS 121+