

Pittsburg State University

College of Arts and Sciences Program Guide

Degree: Bachelor of Science

Major: Physics

Emphasis/Option: Polymer Physics

Minor (if required):

As of Fall 2013

General Education Component (36-43 hours)

Basic Skills** (9 hours)

General Education Electives (30-37 hours)

Sciences** (4-5 hours)

Social Studies (3 hours)

Political Studies (3 hours)

Producing and Consuming** (2-3 hours)

Fine Arts and Aesthetic Studies (2-3 hours)

Cultural Studies (3-5 hours)

Health and Well-Being (4-6 hours)

Human Heritage (6 hours)

** MATH 150, a computer programming course and PHYS 104/130 or PHYS 100/130 required in the major partially fulfill General Education requirements.

Core Physics Courses (35 hours)

(a) Physics

PHYS 110: Introductory Mathematical Physics	1
PHYS 500: Mathematical Physics	3
PHYS 510: Analytical Mechanics I	
PHYS 512: Electricity and Magnetism I	
PHYS 516: Modern Physics I	
PHYS 530: Intermediate Physics Laboratory ()	3
PHYS 699: Senior Review and Assessment	

(b) Other

CHEM 215: General Chemistry I	3
and CHEM 216: General Chemistry I Laboratory	
CHEM 225: General Chemistry II.	3
and CHEM 226: General Chemistry II Laboratory	2
MATH 150: Calculus I	5
CIS 230: Visual Basic Programming	3
or CIS 240: C ++ Programming	3
or CIS 245: Java Programming	3

Polymer Physics Emphasis (26 hours)

(a) Physics

PHYS 104: Engineering Physics I	. 4
or PHYS 100: College Physics I	.4
and PHYS 130: Elementary Physics Laboratory I	
PHYS 105: Engineering Physics II	.4
and PHYS 132: Engineering Physics Laboratory II	. 1
or PHYS 101: College Physics II	
and PHYS 131: College Physics Laboratory II	

(b) Physics Electives

Six hours of physics electives with course numbers greater than 500 subject to the approval of the Physics Department.

(c) Other

CHEM 320: Introductory Organic Chemistry	3
or CHEM 325: Organic Chemistry I	
CHEM 326: Organic Chemistry Laboratory	
CHEM 620: Polymer Chemistry	
and CHEM 621: Polymer Chemistry Laboratory	

The Emphasis in Polymer Physics is an ideal double major with a BS in Chemistry with Emphasis in Polymer Chemistry or with a BSET in Plastics Engineering Technology.

GENERAL EDUCATION REQUIREMENTS (30-37 hrs.)				
Basic Skil	lls		-13 hours	
COMM	207	Speech Communication	3	
ENGL	101	English Composition		
ENGL	190	Honors English Composition		
	L 299	Introduction to Research Writing		
Sciences		(0.1)	8-9 hours	
		s (Select one)	-	
BIOL		112 General Biology and Laboratory		
BIOL		Environmental Life Science		
BIOL	211	Principles of Biology I	4	
Social Stu			3 hours	
SOC	100	Introduction to Sociology	3	
WOMEN	200	Introduction to Women's Studies	3	
Political S	tudic	as .	3 hours	
POLS		U.S. Politics		
•	-	Consuming	5-6 hours	
•	e fron	n two of the following three categories	;)	
Economy			_	
ECON	191			
FCS		Consumer Ed. and Personal Finance	3	
Technolog		0 . 5		
EET		Computer Programming for Electronic		
GT		Introduction to Technological System		
GT EDTH		Technology and Civilization		
TF	551	Technology for the Classroom	د	
TM		Societal Influence of Technology		
1 101	550	Cocicial influence of Technology		
Fine Arts	and A	Aesthetic Studies (Select one)	. 2-3 hours	
ART		Printmaking and Paper Arts		
ART		Introduction to the Visual Arts		
ART		The Designed World		
ART	217	Crafts I	3	
ART	222	Jewelry Design I	3	
ART		Drawing I		
ART		Ceramics I		
ART		Sculpture I		
ART	277			
ART	288	Western Art History I	3	
ART		Western Art History II		
ART	311 40E	Art Education	3	
COMM	205	Performance Appreciation Performance Studies	د	
COMM				
ENGL		Theatre HistoryIntroduction to Creative Writing		
HHP		Dance Appreciation		
MUSIC	120	Music Appreciation	ع د	
MUSIC	121			
MUSIC		History of Music		
		,		
		es (Select one)	3-5 hours	
MLL MLI		Chinese Language and Culture I		

124 French Language and Culture I 5

Russian Language and Culture I Korean Language and Culture I World Regional Geography Elements of Geography Human Geography	
II Being	4-6 hours
0 15 11	
	3
	3
ne	6 hours
n two of the following three categories,)
Market I Pater 11 4500	
American History from 1865	٠
, and the same that the same t	
General Literature.	3
General Literature(Genre)	3
General Literature(Theme)	3
Literature and Film	3
	_
Introduction to Philosophy	3
Ethics: Applied Emphasis(ئ د
Piomodical Ethics	د
World Religions.	3
•	
	Spanish Language and Culture I

Notes

MLL

NOTE: The information contained herein is intended to be used for the planning of a student's academic program and does not constitute a contract. While this guide was prepared with the latest information, courses, graduation requirements, and curricula are subject to change.

When a student attains 85 semester hours of credit (including current enrollment) the student must apply for a degree check in the Office of the Registrar (Degree Checking Section), Room 102 Russ Hall.

MINIMUM GENERAL REQUIREMENTS: The minimum requirements for graduation include 124 semester hours of which 60 hours must be from a four year university. In addition, 45 semester hours must be upper division and 30 hours in residence at PSU (including 24 of the last 30). Minimum GPA for non-education degree is 2.0 overall [2.0 in major], secondary education degree is 2.5 overall [2.75 in major], and early/late childhood/unified degree is 2.80 overall [3.0 in major]. A minimum GPA of 2.0 in any minor and in residence coursework is required. General Education and all degree requirements are provided in the online catalog. Refer to individual departments for specific requirements.