

# MILLERSVILLE UNIVERSITY

Student Name: \_\_\_\_\_ Student I.D.# \_\_\_\_\_

DEGREE: BA	<b>MAJOR REQUIREMENTS FOR A BA DEGREE IN PHYSICS COMPUTER SCIENCE</b> Total credit hours required: 120.0 minimum
MAJOR: PHYS	
OPTION: CSCI	

## REQUIREMENTS AND POLICIES FOR THE BA PHYSICS MAJOR

### A. Policies for Admission to the Major

1. New students (freshmen and transfers) must be admitted to the Physics major by the Office of Admissions upon admission to the University.
2. Admission into the Physics major from other departments is upon approval of the chairperson of the Department.
3. Non-degree and continuing education students must be admitted to the Physics major by the Office of Admissions.

### B. Policies for Retention in the Major

1. University requirements for retention.

### C. Policies for Completion of the Major

1. Completion of all University curricular requirements.
2. Students majoring in Physics are required to attain a C- or better in MATH 161 - 211 and PHYS 231 - 232 before taking courses which have these courses as prerequisites.

**Note to the student:** *This form is provided as a guide. It is your responsibility to consult regularly with your adviser to be aware of changes and curriculum details which are not incorporated on this form.*

## MAJOR SEQUENCE AND DEGREE REQUIREMENTS

Major: **BA PHYSICS**  
 Option: **COMPUTER SCIENCE**  
 Major Field Requirements: **29.0 credits**  
 Other Requirements: **47.0-53.0 credits**

When applicable, up to six of the **REQUIRED RELATED** courses may be credited toward the Liberal Arts Core subject to normal distribution rules.

Course No.	Short Title	C.H.	Grade	Course No.	Short Title	C.H.	Grade
<b>REQUIRED PHYSICS COURSES (29.0 credits)</b>				<b>REQUIRED RELATED (47.0-53.0 credits)</b>			
PHYS 231	Physics I with Calculus	5.0	_____	<b>Chemistry (8.0 credits)</b>			
PHYS 232	Physics II with Calculus	5.0	_____	CHEM 111	Intro Chemistry I	4.0	_____
PHYS 233	Modern Theory Wave/Particles	3.0	_____	CHEM 112	Intro Chemistry II	4.0	_____
PHYS 311	Mechanics I	3.0	_____	<b>Computer Science (20.0 credits) *</b>			
PHYS 321	Electromagnetic Fields I	3.0	_____	CSCI 140	Discrete Structures	4.0	_____
PHYS 334	Macro/Thermodynamics	3.0	_____	CSCI 161	Intro to Computing I	4.0	_____
PHYS 335	Quantum Sys/Stat	3.0	_____	CSCI 162	Intro to Computing II	4.0	_____
PHYS 351	Intermediate Lab I	1.0	_____	CSCI 370	Computer Architecture	4.0	_____
PHYS 492	Research & Seminar	2.0	_____	CSCI 362	Data Structures	4.0	_____
PHYS 498	Independent Study/Research	1.0	_____	<b>Computer Science Electives (4.0 credits) *</b>			
				CSCI 385	Real-Time Systems	4.0	_____
				CSCI 395	Computer Networks	4.0	_____
				CSCI 456	Robotics/Comp Vis.	4.0	_____
				*These courses fulfill the requirements for a <u>MINOR in Computer Science</u> .			
				<b>Mathematics (15.0 credits)</b>			
				MATH 161	Calculus I	4.0	_____
				MATH 211	Calculus II	4.0	_____
				MATH 311	Calculus III	4.0	_____
				MATH 365	Ord Diff Equations	3.0	_____
				<b>Foreign Language (0 - 6.0 credits)</b>			
				Competency required through the elementary level (FORL 101 and 102). To satisfy this requirement with two years of successful H.S. study in one language, please have your adviser contact the Degree Audit Office at dars@millersville.edu confirming the competency has been met.			
				_____ 101	Elementary I	3.0	_____
				_____ 102	Elementary II	3.0	_____