

**Department of Physics  
West Chester University of Pennsylvania**

**Cooperative Physics-Engineering Dual-Degree Programs**

B.S. Physics, West Chester University and B.S. Engineering,  
From either The Pennsylvania State University or Philadelphia University

Semester 1

WRT 120	Effective Writing I	3	G
MAT 161	Calculus I <sup>1</sup>	4	G
PHY 115	Engineering Graphics I	1	
ECO 111	Princ. of Econ. (Macro)	3	G
CSC 141	Computer Science I	3	G
	Diverse Comm. Elective	3	G
		17	

Semester 2

WRT 2XX	Effective Writing II	3	G
MAT 162	Calculus II	4	
PHY 170	Physics I	4	
PHY 116	Engineering Graphics II	1	
ECO 112	Princ. of Econ. (Micro)	3	G
		15	

Semester 3

CHE 103	General Chemistry I	3	G
CRL 103	Exper. Gen. Chem. I	1	
MAT 261	Calculus III	3	
PHY 180	Physics II	4	
	Humanities Gen. Ed.	3	G
		14	

Semester 4

CHE 104	General Chemistry II	3	
CRL 104	Exper. Gen. Chem. II	1	
MAT 343	Differential Equations	3	
PHY 240	Intro. to Modern Physics	3	
PHY 260	Engineering Statics	3	
	Interdisciplinary Elect. <sup>2</sup>	3	G
		16	

Semester 5

PHY 300	Mechanics	3	
PHY 310	Inter. Physics Lab I	2	
PHY	Physics Elective <sup>3</sup>	3	
SPK 230	Bus. & Prof. Speech	3	G
	Humanities Gen. Ed.	3	G
	Gen. Ed. Elective	3	G
		17	

Semester 6

PHY 370	Mathematical Physics	3	
PHY 320	Inter. Physics Lab II	2	
PHY	Physics Elective <sup>3</sup>	3	
	Arts Gen. Ed.	3	G
	Gen. Ed. Elective	3	G
	Gen. Ed. Elective	3	G
		17	

A. Majors shall not be permitted more than one repeat of a Physics course.

B. Upper level courses (numbered 300 or above) must be completed with a grade of C or better.

<sup>1</sup> See prerequisites in Undergraduate Catalog

<sup>2</sup> SCB 210 recommended, but not required.

<sup>3</sup> The six credits of Physics electives must be selected from among the following options:

1. Two courses chosen from PHY 330 Electronics, PHY 420 Atomic Physics and Quantum Mechanics and PHY 430 Electricity and Magnetism

2. Students intending to enroll in chemical engineering must have CHE 231 and 232, in mining engineering, ESL 201 and ESS 101, and in petroleum and natural gas engineering, ESL 201 and ESS 101. Students intending to enroll in aerospace, electrical or nuclear engineering must take PHY 420 and one of either PHY 330 or PHY 430.

'G' denotes a course which fulfills the University's General Education requirement. For a list of approved courses, consult the Undergraduate Catalog.

Transfer to The Pennsylvania State University or to Philadelphia University is contingent upon recommendation by the Department and having a minimum GPA which depends upon the selected Engineering program.

*Note:* The program with Penn State is not available to transfer students and must be completed in three years. These restrictions do not apply to the program with Philadelphia University.

Currently, the following programs in the College of Engineering at The Pennsylvania State University are under enrollment control. The effective dates listed below are for matriculation at Penn State.

<u>Program</u>	<u>Effective Date</u>	<u>Minimum GPA Requirement</u>
Computer Engineering	Fall 2002	3.5
Mechanical Engineering	Summer 2005	3.5
Aerospace Engineering	Summer 2006	3.5