

**Program of Studies for Specialization in Photonics:  
(For freshmen entering Fall 2009 and subsequently)**

<b>Freshman Year/Fall Semester</b>	<b>Cr.</b>	<b>Freshman Year/Spring Semester</b>	<b>Cr.</b>
___ 95.161 Physics I (H)	4	___ 95.112 Freshman Physics Seminar	1
___ 96.161 Physics I Lab (H)	2	___ 95.164 Physics II (H)	4
___ 42.101 (Gen. Ed.) College Writing I	3	___ 96.164 Physics II Lab (H)	2
___ 92.131 Calculus I	4	___ 42.102 (Gen. Ed.) College Writing II	3
___ . . . (Gen. Ed.) SS	<u>3</u>	___ 92.132 Calculus II	4
	<b>16 (6)</b>	___ . . . (Gen. Ed.) AH	<u>3</u>
			<b>17 (7)</b>
<b>Sophomore Year/Fall Semester</b>	<b>Cr.</b>	<b>Sophomore Year/Spring Semester</b>	<b>Cr.</b>
___ 95.269 Physics III (H)	4	___ 95.210 Intro. Modern Physics	3
___ 96.261 Physics of Materials & Devices	3	___ 96.262 Prin. Lab Automation	3
___ 84.121 Chemistry I	3	___ 84.122 Chemistry II	3
___ 84.123 Chemistry I Lab	1	___ 84.124 Chemistry II Lab	1
___ 92.231 Calculus III	<u>4</u>	___ 92.234/236 Differential Equations	3
	<b>15(7)</b>	___ . . . (Gen. Ed.) SS	<u>3</u>
			<b>16 (6)</b>
<b>Junior Year/Fall Semester</b>	<b>Cr.</b>	<b>Junior Year/Spring Semester</b>	<b>Cr.</b>
___ 95.337 Geometrical Optics w. Lab	4	___ 95.435 Intro. Quantum Mechanics I	3
___ 96.353 Electromagnetism I	3	___ 95.338 Physical Optics and Waves	3
___ 96.393 Adv. Exper. Physics I	2	___ 96.338 Physical Optics Lab	2
___ 92.221 Linear Algebra I	3	___ 92.411 Complex Variables I	3
___ . . . (Gen. Ed.) AH	<u>3</u>	___ . . . (Gen. Ed.) SS	<u>3</u>
	<b>15(9)</b>		<b>14(8)</b>
<b>Senior Year/Fall Semester</b>	<b>Cr.</b>	<b>Senior Year/Spring Semester</b>	<b>Cr.</b>
___ 95.413 Mechanics	3	___ 95.440 Image Processing w/Lab	4
___ 95.421 Statistical Thermodynamics	3	___ 95.454 Physics Capstone	3
___ 95.439 Electro-Optics w/ Lab	4	___ . . . Free Elective	3
___ . . . (Gen. Ed.) AH	<u>3</u>	___ . . . Free Elective	3
	<b>13 (10)</b>	___ . . . Free Elective	<u>1</u>
			<b>14 (7)</b>

**Minimum Total Credits = 120**

Consult the *Schedule of Classes* booklet regarding the General Education (Gen. Ed.) requirements. See your *Faculty Advisor* to determine which courses you should take to fulfill the Gen. Ed. Diversity (D) and Ethics (E) requirements. General Education courses may be taken in any sequence.

(x) Number of specified physics credits.

Note: For general advising questions, see Dr. Aram Karakashian.