

Required Courses for Students Majoring in Optics and Photonics in the College of Science (applicable to students admitted in Fall 2008)

Academic Year Semester Course Titles	First Year		Second Year		Third Year		Fourth Year	
	Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring
Common Required Courses (30)	Chinese (3)	Chinese (3)	History (2)					
	Foreign Languages (3)	Foreign Languages (3)						
<ul style="list-style-type: none"> ● 16 credit hours of General Education courses, of which one course must be from each of the following core areas: Humanities & Thought, Physical Science, Applied Science, and Social Thought & Phenomenon. The remaining courses may be General Education electives. ● One non-credit Physical Education course each semester of their first three academic years, two of which must be Freshman PE I and Freshman PE II. ● One non-credit Service Education course in the fall and spring semester of an academic year. 								
Required Courses of the Department (71+6)	Calculus MA1001 (4)	Calculus MA1002 (4)	Electromagnetism I OS2003 (3)	Electromagnetism II OS2004 (3)	Optical Systems OS3001 (3)	Intro to Electro-Optical Engineering OS3002 (3)		
	General Physics PH1001 (3)	General Physics PH1002 (3)	Microelectronics I OS2005 (3)	Microelectronics II OS2006 (3)	Optics II OS3003 (3)	Experiments in Optoelectronic Semiconductor OS3008 (1)		
	General Chemistry I CM1005 (3)	General Chemistry I (mandatory course offerings) (3)	Circuit Theory OS2009 (3)	Optics I OS2002 (3)	Experiments in Optics OS3009 (1)	Optical Design OS3006 (3)		
	Intro to Optics and Photonics I OS1006 (1)	Intro to Optics and Photonics II OS1007 (1)	Engineering Mathematics II OS2008 (3)	Experiments in Microelectronics OS2010 (1)	General Biology I LS1013 (mandatory course offerings) (3)	Special Topics in Optics and Photonics II OS4002 (1)		
	General Physics Laboratory PH1003 (1)	General Physics Laboratory PH1004 (1)		Modern Physics OS2001 (3)	Optoelectronic Semiconductor Physics OS2011 (3)			
	General Chemistry Laboratory CM1008	Engineering Mathematics I			Special Topics in Optics and Photonics			

	(1)	OS2007 (3)			I OS4001 (1)			
	Intro to Computer Science OS1005 (2)							
Total Semester Credit Hours	21	18+3 (mandatory course offerings)	12	13	11+3 (mandatory course offerings)	8	0	0
Notes	<ol style="list-style-type: none"> The numerical figures in parentheses refer to course credit hours. The total number of credit hours for required courses amounts to 101; the minimum number of earned credit hours required for graduation is 128. Students are required to earn a minimum of 21 credit hours of elective courses offered by this Department (i.e., courses whose titles start with OS) during their term of study at the University. Undeclared majors in the College of Science and students majoring in Optics and Photonics at the undergraduate level must obtain the approval of both their advisor and the head of this Department before taking any electives to fulfill the 21 elective credit-hour requirement and are not subject to Article 3. Optics and photonics majors must take (but are not required to pass) General Chemistry II in the second semester of their freshman year and General Biology I in the first semester of their junior year. (Credit hours of failed courses may not be counted toward the student's earned credit hours.) The calculation of semester hours shall not include credit hours earned from General Education courses or History. All first-year students are required to take Freshman English. Before being permitted to graduate, students must demonstrate their English proficiency by reaching a threshold score in one of the English proficiency tests recognized by the Language Center or by passing two semesters of Remedial English; credit hours thus earned may not be counted toward the minimum number required for a baccalaureate degree (for details, refer to the University's <i>Implementation Procedures for Freshman Foreign Language Courses</i> and <i>Implementation Procedures for Remedial English Courses</i>). Students are required to receive a passing grade in Service Education in accordance with the University's <i>Service Education Implementation Procedures</i> before being permitted to graduate. 							