

Guidelines for Students Enrolling in the Non-Degree Conferring Program in Optical Sciences

Approved by a meeting of the Institute of Optical Sciences on August 15, 2000
 Amended and approved by a meeting of the Institute of Optical Sciences on March 1, 2005
 Approved by a meeting of the College of Science Committee on April 25, 2001
 Amended by a meeting of the College of Science Committee on March 2, 2005
 Approved by a meeting of the National Central University Curriculum Committee on May 1, 2001
 Amended and approved by a meeting of the National Central University Curriculum Committee on March 15, 2005
 Approved by a meeting of the Academic Affairs Committee on June 21, 2001
 Amended and approved by a meeting of the Academic Affairs Committee on March 31, 2005
 Amended and approved by a meeting of the Institute of Optical Sciences on November 7, 2003
 Amended and approved by a meeting of the Department of Optics and Photonics on September 7, 2007
 Amended and approved by a meeting of the College of Science Curriculum Committee on November 25, 2003
 Amended and approved by a meeting of the College of Science Curriculum Committee on September 19, 2007
 Amended and approved by a meeting of the National Central University Curriculum Committee on December 3, 2003
 Amended and approved by a meeting of the National Central University Curriculum Committee on October 4, 2007
 Amended and approved by a meeting of the Academic Affairs Committee on December 23, 2003
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 Amended and approved by a meeting of the Institute of Optical Sciences on October 15, 2004
 Amended and approved by a meeting of the College of Science Curriculum Committee on November 16, 2004
 Amended and approved by a meeting of the National Central University Curriculum Committee on December 7, 2004
 Amended and approved by a meeting of the Academic Affairs Committee on December 30, 2004

1. The aim of this program is to provide students with a foundation in optics and photonics science so as to enable them to work or conduct research in this area.
2. Students studying in any college or department in the University with the exception of the Department of Optics and Photonics and the Institute of Optical Sciences may apply for entry into this program.
3. University students who have earned 27 or more credit hours in this program shall be regarded as having completed the program. The name of the program as well as the number of credit hours earned shall be clearly indicated on the transcripts of the students, who shall be awarded a certificate of completion.
4. The course and credit hour requirements for this program are as follows:

(1) Basic required courses (a total of nine credit hours)

Course Titles	Credit Hours	Course Codes
General Physics	3	PH1001、PH1002、PH1021、PH1022
Calculus	3	MA1001、MA1002、MA1003、MA1004、MA2045、MA2046
Applied Mathematics/ Engineering Mathematics	3	AP2007、AP2008、PH2003、AP2044、AP3024、AP6067、CE1006、CE2005、CH2009、CH2010、CI2017、CI2018、CI3025、CI3026、CO1003、EE2003、EE2012、PH2004、GP2019、GP2020、GP2061、MA2007、MA2008、MA3008、ME5027、OS6038、SS6009、SS6010

(2) Basic elective courses (a total of six credit hours)

Course Names	Credit hours	Course Codes
Modern Physics	3	AP3014、EE2023、PH2035
Electromagnetism	3	AP2017、AP2018、PH2001、PH2002、EE2004、EE2015、EE5009、GP2013、ME3055、SS6012
Solid State Physics	3	EE6033、EE8035、EE3029
Solid State Chemistry	3	CM6063
Materials Science	3	CH8071、ME2051、ME3048
Electronics	3	AP3015、AP3016、CE2009、EE2001、EE2002、ME2065、EE3001、OS6033、PH3037、PH3038、EE2009、EE2011
Principles of Communication	3	CE6009、CO6019、EE3004、EE4013、CO8007
Control System	3	EE3003、EE6012、EE6030、EE6050、EE7043、ME4061、ME4062、ME4063
Semiconductor Physics/ Devices	3	EE6044、EE3034、EE6062、EE7039
Principles of Microprocessor	3	CE3046、EE3002
Digital Signal Processing	3	CO1002、CO6021、CO8003、EE5011、EE6009
Image Processing	3	CE6033、OS6008

(3) Photonics required courses (a total of six credit hours)

Course Titles	Credit Hours	Course Codes
Optics	3	PH3059、PH3060、OS6011、ME2021、ME3062
Introduction to Photonics Engineering	3	OS1002、OS6012、OS7062

(4) Photonics elective courses (a total of six credit hours)

Course Titles	Credit Hours	Course Codes
Fourier Optics	3	OS6003
Photonics	3	OS6007
Geometrical Optics	3	OS6010、OS6015
Interferometry and Interferometers	3	OS6016
Laser Physics	3	OS6057
Photonics Semiconductor Devices	3	EE6020、EE8031、OS6072、OS7078
Radiation and Detection	3	OS6023
Fiber Optic Communications	3	OS6032

5. Whether courses with similar titles and content taken in other University programs can be accepted in lieu of courses offered by this program shall be left to the discretion of the Department of Optics and Photonics.
6. These guidelines shall be implemented and entered into force upon approval by a meeting of the Academic Affairs Committee. The same procedure applies to any amendment of these guidelines.