

**Course Structure for Ph. D Program**  
**, Graduate Institute of Electro-optical Engineering**  
**National Taiwan Normal University**

Adaptive to Class of	Required Credit(s)	Elective Credit(s)	Free Elective Credit(s)	Minimum Total Credits for Graduation
111	0.0	18.0	0.0	18.0

Note: The first alphabet "E" on the course name refers to the course in English as a medium of instruction

**I. Required Courses: 0.0 credit is required**

**II. Elective Courses: 0.0 credit is required**

**III. Courses Offered to Students in Different Divisions**

Required Course, 0.0 credit is required

Elective Course: 18.0 credits are required

Course Code	Course Name	Credit(s)	Credit Unit		Note
			Lecture Hour	Lab/Practice Hour	
OEC8159	1 E Seminar	2.0	2.0	0.0	This course can be retaken
OEC8012	2 E Laser Engineering	3.0	3.0	0.0	
OEC8112	3 E Principles And Applications of Ultrafast Optics	3.0	3.0	0.0	
OEC8117	4 E Physics and Applications of Nano-Magnetism (II)	3.0	3.0	0.0	
OEC8129	5 E Special Topics on Electro-optical System Measurement	3.0	3.0	0.0	
OEC8134	6 E Technology and Electronics for Next-Transistor	3.0	3.0	0.0	
OEC8139	7 E Modern Holography	3.0	3.0	0.0	
OEC8144	8 E Fourier Optics	3.0	3.0	0.0	
OEC8155	9 E Bio-Chips Manufacturing Technology	3.0	3.0	0.0	
OEC8162	10 E Electromagnetism in Electro-Optics	3.0	3.0	0.0	
OEC8163	11 E Optical Electronics	3.0	3.0	0.0	
OEC8164	12 E Optical Properties of Solids	3.0	3.0	0.0	
OEC8013	13 E Introduction to Optoelectronic Devices	3.0	3.0	0.0	
OEC8124	14 E Optical Pattern Processing	3.0	3.0	0.0	

**IV. Free Elective Credits: 0.0 credit is required**