

# Optical Sciences and Engineering (2011-12)

Below is the *advised sequencing* of courses for this degree,  
the official degree requirements are found in the University General Catalog.

FRESHMAN YEAR				SOPHOMORE YEAR			
First Semester		Second Semester		First Semester		Second Semester	
Course	Units	Course	Units	Course	Units	Course	Units
ENGR 102	3	MSE 110	4	OPTI 201R	3	OPTI 202R	3
MATH 125 or 124 <sup>#</sup>	3/5	MATH 129	3	OPTI 201L	1	OPTI 202L	1
CHEM 151	4	PHYS 141	4	MATH 223	4	OPTI 280	1
ENGL 101/107	3	ENGL 102/108	3	PHYS 241	4	OPTI 240	3
Tier 1 INDV*	3	Tier 1 INDV*	3	Tech Elective **	3	MATH 254	3
						Tech Elect**	3
						Tier 1 TRAD*	3
TOTAL	16/18	TOTAL	17	TOTAL	15	TOTAL	17

JUNIOR YEAR				SENIOR YEAR			
First Semester		Second Semester		First Semester		Second Semester	
Course	Units	Course	Units	Course	Units	Course	Units
OPTI 310	3	OPTI 330	3	OPTI 406	3	OPTI 415	3
OPTI 380A	1	OPTI 340	3	OPTI 430	3	ENGR 498B	3
OPTI 360/ECE 207	3	OPTI 370	3	ENGR 498A	3	OPTI 471B	2
Tech Elect**	3	OPTI 380B	1	OPTI 421	3	Tech Elect**	3
MATH 322	3	Tech Elect**	3	OPTI 471A	2	Tier 1 TRAD*	3
Tier 2 Hum or Arts	3	Tier 2 INDV	3	Tech Elect**	3		
TOTAL	16	TOTAL	16	TOTAL	17	TOTAL	14

TOTAL UNITS = 128

# MATH 124 is a 5 unit version of MATH 125. Students taking MATH 124 should consider delaying the Tier 1 INDV course to maintain a reasonable academic load.

\* INDV/TRAD/Art/Hum courses must meet University general education requirements. One course must be recognized by the University as focusing on gender, race, class, ethnicity, sexual orientation or non-western area of studies. TRAD 101 satisfies this requirement.

\*\* Tech Elect courses include 18 units taken from one of the following four tracks:

Optics: 18 units of OPTI XXX or as approved by the advisor.

Opto-Electronics: ECE 274, 220, 381, and 7 units of ECE 3XX-4XX as approved by the advisor.



Optical Materials: MSE 345, 365, 434, 480, and 4 units of MSE XXX as approved by the advisor.

Opto-Mechanics: CE 214, AME 250, AME 324A, AME 324B, and 6 units of AME XXX as approved by the advisor.

\*\*\* Students following the Opto-Electronics track must take an additional 3 units of OPTI Tech Elective, as approved by advisor, in place of ECE 207.

The following courses must be completed with a grade of “C” or better: Math 124/125, Math 129, Phys 141, all OPTI courses and OPTI course Pre-Requisites.

Please visit the [College of Optical Sciences homepage](#) for further information.