

Optical Sciences and Engineering (2009 - 10)

Below is the *advised sequencing* of courses for this degree.

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 [#]	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	3	ENGL 102	3	PHYS 241	4	Tech Elect**	3-4
Tier 1 INDV*	3	Tier 1 INDV*	3	Tier 1 TRAD*(see ##)	3	MATH 254	3
						OPTI 240	3
						Tier 1 TRAD*	3
TOTAL	16/18	TOTAL	17	TOTAL	15	TOTAL	17-18

Advanced standing is required for 3/400 level courses taught by the College

JUNIOR YEAR				SENIOR			
First Semester		Second Semester		First Semester		Second Semester	
Course	Units	Course	Units	Course	Units	Course	Units
OPTI 310	3	OPTI 330	3	OPTI 400	3	OPTI 421	3
OPTI 370	3	OPTI 340	3	OPTI 410	3	ENGR 498B	3
OPTI 380A	1	OPTI 360***	3	ENGR 498A	3	OPTI 471B	2
Tech Elect**	3	OPTI 380B	1	OPTI 430	3	Tech Elect**	3
MATH 322	3	Tech Elect**	3	OPTI 471A	2	Tech Elect**	3
Tier 2 Hum or Arts	3	Tier 2 INDV	3	Tech Elect**	3-2		
TOTAL	16	TOTAL	16	TOTAL	17-16	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.

Students who choose to take technical electives from the optical materials track should take MSE 240 at this time and take the Tier 1 TRAD course in place of one of the later technical electives.

* INDV/TRAD/Art/Hum courses must meet University general education requirements. One course must be recognized by the University as focusing on non-western culture, race, gender or ethnicity. 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 220, 207(or OPTI 360), 381, and 8 units of ECE 3XX-4XX as approved by the advisor.

Optical materials: MSE 345, 365, 434, 480, and 6 units of MSE XXX as approved by the advisor.

Opto-mechanics: CE 214, AME 324A, and 11 units of AME XXX as approved by the advisor.

*** Students following the Opto-Electronics track may take ECE 207 instead of OPTI 360.

Please visit the [Optical Science Center homepage](#) for further information.