

Bachelor of Science in Optical Sciences and Engineering[†]

College of Optical Sciences

Mapping of Program Outcomes to Program Educational Objectives

		Program Outcomes					
H = High M = Medium L = Low	Have a good understanding of the basic physics and mathematics underlying optical phenomena and optical systems	Are able to apply their understanding of physics and mathematics to solve technical and engineering problems	Are able to effectively use optical components, optical and electronic instruments, and computers to perform experiments and do testing in an optics laboratory	Are able to work effectively in teams to solve engineering and design problems	Are able to design optical systems and components as needed in their professional careers	Are able to effectively communicate with others both orally and in writing	Understand their professional and ethical responsibilities as engineering or scientific professionals
	(ABET: A,E,H,K)	(ABET: A,E,I,K)	(ABET: B,C,E,J,K)	(ABET: D)	(ABET: B,C,D,E,I,J,K)	(ABET: G)	(ABET: F,H,I)
Program Educational Objectives							
Graduates will demonstrate a solid foundation in the basic principles of optics, mathematics, and physics necessary to understand a broad range of optical systems.		H	H			M	
Graduates will utilize optical engineering tools to design, build, analyze, improve, and test systems in which optics is an enabling technology.			H	H		H	

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[†] Accredited by the Engineering Accreditation Commission of ABET, <http://www.abet.org>

Program Outcomes							
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Program Educational Objectives							
Graduates will communicate effectively in oral, written, and graphical forms.							
				M		H	
Graduates will work successfully both independently and on multidisciplinary teams.							
		L		H	L		
Graduates will demonstrate an adherence to ethical principles and practices in their professional career.							
							H
Graduates will contribute to society by engaging in public and professional service activities while building an understanding and appreciation of the impact that engineering has on society.							
							H

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Program Educational Objectives							
Graduates will work successfully at an advanced level within their area of expertise through application of problem-solving skills.	H	H	M		M		
Graduates will engage in life-long learning and professional development through self-study, continuing education, or graduate and professional studies in engineering, science, business, law, or medicine.		H				L	M

Note: The Program Educational Objectives listed above are proposed objectives. We will seek approval of these proposed objectives with evidence statements through our undergraduate curriculum committee, faculty, students, and external constituents no later than December 2016.