

**Department:** Electrical and Computer Engineering

**Chair:** Dr. W. B. Mikhael

**Participating Faculty:** Dr. M. J. Soileau

Dr. M. G. Moharam

Dr. P. Delfyett

**Program Name & Code:** M.S. in Optical Science and Engineering – 14.1005 **Level:** Graduate

<b>Unit Mission</b>	<b>Program Intended Outcome/Objective</b>	<b>Assessment Criteria &amp; Procedures</b>	<b>Assessment Results / Comments</b>	<b>Use of Results</b>
To attain prominence in optical science and engineering graduate education and research	<p>1. Graduate will be able to demonstrate a solid foundation in the principles of optical science and engineering.</p> <p>2. Graduates will acquire professional competence in optical science and engineering preparing them for employment in their chosen field.</p>	<p>1.1 100% of the students in the non-thesis option will demonstrate their competence by passing an exit comprehensive written exam.</p> <p>1.2 at least 90% of the thesis option students will pass the oral exam component of the thesis defense administrated by the thesis examination committee</p> <p>2. At least 90% of graduates who seek employment in their chosen field within 6 months of graduation.</p> <p>Utilize information from exit interview and follow-up alumni survey.</p>	<p>1.1 100% of the non-thesis-option students passed the overall comprehensive exam in their first attempt.</p> <p>1.2 100% of the thesis-option students passed the fundamental part of the oral thesis defense in their first attempt.</p> <p>1.3 All students passed the individual components of the optical science and engineering core.</p> <p>2.1 All graduates are either enrolled in a Ph.D. program or employed in industry or government.</p> <p>2.2 Graduates expressed preference in a more applied research program.</p>	<p>1. Criteria met. No action taken.</p> <p>2. Criteria met. The balance between the applied and fundamental components of the academic program and of the research emphasis is being reviewed.</p>

	<p>3. Graduates will be admitted to graduate programs in established research institutions.</p>	<p>3.1 At least 80% of graduates who are seeking graduate education will be enrolled in graduate schools upon graduation.</p> <p>3.2 At least 80% of graduates admitted to graduate schools will receive full scholarships or research/teaching assistantships.</p> <p>Utilize information from exit interview and follow-up alumni survey.</p>	<p>3. All graduates who are seeking graduate education are currently enrolled in a Ph.D. program receiving graduate research assistantships.</p>	<p>3. Criteria met. No action taken.</p>
	<p>4. Students completing the MS thesis option will be able to conduct independent research and communicate the results of their research in a professional forum.</p>	<p>4.1 At least 50% of the thesis-option graduates will publish a refereed journal article or proceeding paper based on their MS research within one year of graduation.</p> <p>4.2 All graduates must demonstrate ability to conduct independent research to an examining committee of at least 4 faculty members in the discipline.</p>	<p>4.1 75% of the graduates published at least one journal/proceeding paper and made at least one technical presentation in a regional or national professional conference.</p> <p>4.2 All students were found by the examining committee to be able to conduct MS level research.</p>	<p>4. Criteria met. No action taken.</p>