

**Kazuo Inamori School of Engineering  
Graduate Degree Requirements**

**M.S. Materials Science and Engineering**

<b>Undergraduate Preparation</b>	<ul style="list-style-type: none"> <li>• Four year degree in physical sciences or engineering program</li> </ul>
<b>Total credit hours</b>	<ul style="list-style-type: none"> <li>• Thirty (30) hours of graduate credit, including 15 credits of coursework and 15 credits of thesis</li> </ul>
<b>Transfer Credit</b>	<ul style="list-style-type: none"> <li>• Up to 6 credit hours of relevant graduate work, subject to approval by the Graduate Program Director</li> </ul>
<b>Course Work</b>	<p>At least 15 credit hours of course work, including</p> <ul style="list-style-type: none"> <li>• CEMS 545 – Characterization in Materials Science &amp; Engineering (3 credits)</li> <li>• CEMS 503 – Thermodynamics of Materials (3 credits)</li> </ul> <p>or</p> <ul style="list-style-type: none"> <li>• CEMS 501 – Solid State Physics</li> <li>• Graduate-level technical electives (9 credits)</li> <li>• ENGR 690 – Graduate seminar (0 credits) each semester of full-time enrollment</li> </ul>
<b>Thesis Credits</b>	<p>At least 15 credit hours of thesis, including</p> <ul style="list-style-type: none"> <li>• ENGR 660 – Research seminar (1 credit), preferably taken during the first semester of graduate enrollment</li> <li>• CEMS 680 – Thesis research (14 credits)</li> </ul>
<b>Progress Reports</b>	<ul style="list-style-type: none"> <li>• One-page progress report summarizing thesis progress and plans for upcoming semester</li> </ul>
<b>Written Thesis and Oral Defense</b>	<ul style="list-style-type: none"> <li>• Written thesis (typically &lt; 50 page text) meeting approval of thesis advisory committee</li> <li>• Successful oral defense of thesis</li> </ul>
<b>Manuscript Requirement</b>	<ul style="list-style-type: none"> <li>• Preparation and submission of at least one manuscript for publication in peer-reviewed journal</li> </ul>
<b>Length of Study</b>	<ul style="list-style-type: none"> <li>• Designed to be completed in 16 months (3 semesters plus summer) of full time study</li> <li>• Must be completed within six years of admission*</li> </ul> <p><i>*Students must maintain continuous enrollment.</i></p>