Kazuo Inamori School of Engineering  
Graduate Degree Requirements  
  
M.S. Materials Science and Engineering  

<table>
<thead>
<tr>
<th>Undergraduate Preparation</th>
<th>• Four year degree in physical sciences or engineering program</th>
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<tr>
<td>Total credit hours</td>
<td>• Thirty (30) hours of graduate credit, including 15 credits of coursework and 15 credits of thesis</td>
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<tr>
<td>Transfer Credit</td>
<td>• Up to 6 credit hours of relevant graduate work, subject to approval by the Graduate Program Director</td>
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| Course Work               | At least 15 credit hours of course work, including  
                                • CEMS 545 – Characterization in Materials Science & Engineering (3 credits)  
                                • CEMS 503 – Thermodynamics of Materials (3 credits)  
                                or CEMS 501 – Solid State Physics  
                                • Graduate-level technical electives (9 credits)  
                                • ENGR 690 – Graduate seminar (0 credits) each semester of full-time enrollment |
| Thesis Credits            | At least 15 credit hours of thesis, including  
                                • ENGR 660 – Research seminar (1 credit), preferably taken during the first semester of graduate enrollment  
                                • CEMS 680 – Thesis research (14 credits) |
| Progress Reports          | • One-page progress report summarizing thesis progress and plans for upcoming semester |
| Written Thesis and Oral Defense | • Written thesis (typically < 50 page text) meeting approval of thesis advisory committee  
                                • Successful oral defense of thesis |
| Manuscript Requirement    | • Preparation and submission of at least one manuscript for publication in peer-reviewed journal |
| Length of Study           | • Designed to be completed in 16 months (3 semesters plus summer) of full time study  
                                • Must be completed within six years of admission* |

*Students must maintain continuous enrollment.