Master of Science Programme in Materials Science and Engineering (International Programme)

Faculty of Science

Admission Requirements

A candidate must:
1. Students must hold a Bachelor of Science, Engineering, or related field;
2. Receive a cumulative GPA of at least 2.50;
3. Have a TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5 or MU GRAD TEST score of 60.

Exceptions from the above conditions may be granted by the Programme Committee and the Dean of Faculty of Graduate Studies;

Curriculum Structure

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>13</td>
</tr>
</tbody>
</table>

| Elective Courses not less than | 12     |

Thesis | 12

Required courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCID 551</td>
<td>Materials Characterization</td>
<td>3(1-4-4)</td>
</tr>
<tr>
<td>SCID 552</td>
<td>Materials Science and Engineering</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCID 553</td>
<td>Thermodynamic of Materials</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCID 559</td>
<td>Materials structure</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCID 659</td>
<td>Seminar M.Sc.</td>
<td>1(1-0-2)</td>
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</tbody>
</table>

Elective Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCID 554</td>
<td>Principle of Nanotechnology</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCID 651</td>
<td>Special Topic in Materials Science and Engineering I</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCID 652</td>
<td>Special Topic in Materials Science and Engineering II</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCPY 511</td>
<td>Atomic and Molecular Physics</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCPY 515</td>
<td>Electrical Materials</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCPY 638</td>
<td>Molecular Quantum Mechanics</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCPY 642</td>
<td>Diffraction Technique</td>
<td>3(3-0-6)</td>
</tr>
</tbody>
</table>
Additional advantages of the programme

The program is research oriented program with the special emphasis on surface science, advanced materials, composites engineering materials, nano-materials, biological materials, corrosion and molecular engineering.

Details of Scholarships

1. Scholarships for International Graduate Students.
2. Scholarship of the 60th Year Supreme Reign of His Majesty King Bhumibol Adulyadej.
3. Institutional Strengthening Program.

Application Process

Application is only available via online application at www.grad.mahidol.ac.th

Required Documents

Prepare the following required documents to submit via online admission system or post:

1. Completed an Online Application at www.grad.mahidol.ac.th which comprised with
   Form A : Application Form
   Form B : Background and Proposed Field of Study
   Form C : Recommendation Forms (directly submitted by at least 2 referees)
2. Two copies of Degree Certificate (with officially certified English translation)
3. Two copies of Academic Transcript (with officially certified English translation)
4. Two copies of Recent Photos (Passport size)
5. Two copies of Passport
6. Two copies of English certificate (TOEFL/ IELTS/ MU-Grad Test)

(For Doctoral Program)
- TOEFL ITP score of at least 500, TOEFL Internet-based score of 61, or IELTS score of 5

(For Master’s Program)
- TOEFL ITP score of at least 480, TOEFL Internet-based score of 54, IELTS score of 5 or MU GRAD TEST score of 60.
Notes
- Only accept TOEFL ITP score from examination center arranged by Faculty of Graduate Studies, Mahidol University.
- TOEFL ITP taken from other domestic and overseas institutes are invalid.
- The test date must be within previous 2 years before application date
- Applicant who obtained a valid English score must submit an official score certificate along with your application. Otherwise, your English score will not be considered.

7. Two copies of Curriculum Vitae
8. Two copies of Statement of Purposes and Career Goals
9. Two copies of Current bank statement / Scholarship letter (if any)
10. Two copies of Concept paper / research proposal (recommended for all applicants)
11. Two copies of additional documents may be requested by each program (such as letter of work experience / professional license/ related certificates and awards)

Submitting documents via online admission system.
- All documents must be in pdf format (maximum size 2 MB)
- Recent photograph must be in jpeg format only (maximum size 2 MB)

Job option after graduation
1. Material Science and Engineering researcher
2. Business developer in material science and Engineering
3. Specialist and consultant in material science and Engineering and related field.

Further information may be obtained from the Director of Graduate Studies, Materials Science and Engineering.
1. Asst. Prof. Teerakiat Kerdcharoen (E-mail: teerakiat.ker@mahidol.ac.th)
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   Tel.: 0 2201 5471       Fax.: 0 2644 5426
2. Dr. Kittitat Subannajui (E-mail: kittitat.sub@mahidol.ac.th)
   Room B400, Biology Building, Floor 4,
   Multi disciplinary Unit, Faculty of Science.
   Tel.: 0 2201 5935       Fax.: 0 2644 5426

Program Coordinator
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Tel.: 0 2201 5471       Fax.: 0 2644 5426

Note 1. For more education information: www.grad.mahidol.ac.th

For more information please contact The Student Admission Section.
Tel. 0 2441 4125 ext. 208-210, 0 2441 9129, E-mail: gradinter@mahidol.ac.th