

Admission Number

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

หลักสูตร วิทยาศาสตร์มหาบัณฑิต

สาขาวิชา วิทยาศาสตร์และวิศวกรรมวัสดุ (หลักสูตรนานาชาติ)

Faculty of Science

คณะวิทยาศาสตร์

Expected number of students to be accepted all year round : 30 Students

**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. Submit a certificate of English proficiency with minimum admission score:
  - IELTS - at least 3 or
  - TOEFL INTERNET BASED - at least 32 or
  - TOEFL ITP (test arranged by Faculty of Graduate Study, Mahidol University) - at least 400 or
  - MU GRAD TEST(Computer based) - at least 36

Important Notes:

- English proficiency score must be taken within 2 years up to the admission date.
  - Application without submitting a valid English certificate will NOT be considered.
  - MU English Competence Standards: [www.grad.mahidol.ac.th](http://www.grad.mahidol.ac.th)
  - MU English proficiency tests, please contact the Language Center, Faculty of Graduate Studies. Tel. 0-2441-4125 ext. 221-222
4. Exemption from the above conditions may be granted by the Programme Committee under exceptional circumstances.

**Written Examination**

There is NO written examination for this program. Applicants must check their eligibility for interview upon the announcing date of the interview list which is scheduled for each admission round.

**Curriculum Structure**

	Credit
Required Courses	13
Elective Courses not less than	12
Thesis	12

	<b>Credit</b>
<b>Required courses</b>	
SCID 551 Materials Characterization	3(1-4-4)
SCID 552 Materials Science and Engineering	3(3-0-6)
SCID 553 Thermodynamic of Materials	3(3-0-6)
SCID 559 Materials structure	3(3-0-6)
SCID 659 Seminar M.Sc.	1(1-0-2)
<b>Elective Courses</b>	
SCID 554 Principle of Nanotechnology	3(3-0-6)
SCID 651 Special Topic in Materials Science and Engineering I	3(3-0-6)
SCID 652 Special Topic in Materials Science and Engineering II	3(3-0-6)
SCPY 511 Atomic and Molecular Physics	3(3-0-6)
SCPY 515 Electrical Materials	3(3-0-6)
SCPY 638 Molecular Quantum Mechanics	3(3-0-6)
SCPY 642 Diffraction Technique	3(3-0-6)
SCCH 523 Polymer Chemistry	3(3-0-6)
SCCH 524 Polymer Characterization	1(1-0-2)
SCCH 527 Polymer Colloids	3(3-0-6)
SCCH 543 Polymer Physics	3(3-0-6)
SCCH 550 Rubber Science and Technology	3(3-0-6)
SCCH 632 Advanced Polymer Chemistry	3(3-0-6)
EGBE 604 Biosensors	3(3-0-6)
EGBE 607 Material and Mechanics in Medicine	3(3-0-6)
<b>Thesis</b>	
SCID 698 Thesis	12(0-36-0)

\* These may change in cases where there are suggestions for the improvement of the curriculum

### **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 60<sup>th</sup> 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](http://www.grad.mahidol.ac.th).

## Required Documents

Applicants must upload all documents via online admission system. All documents must be in PDF format (maximum size 2 MB). Photograph must be in JPEG format.

- Recent photographs (1x1 inch in size)
- A copy of an applicant's degree certificate or a letter of graduation certification (for an applicant with a degree completion)
- A letter certifying that an applicant is currently in the final year prior to graduation (for an applicant seeking for a degree)
- A detailed transcript of a degree (for an applicant with a degree completion)
- A grade report with course names and grades received from the first to the current semester prior to graduation
- A copy of identification card
- A copy of house registration certification
- A copy of Certificate of English proficiency :  
IELTS / TOEFL INTERNET BASED / TOEFL ITP / MU GRAD TEST(Computer based)
- A copy of proof of payment.

## 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](mailto:teerakiat.ker@mahidol.ac.th))**

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## Program Coordinator

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**Note** 1. For more education information : [www.grad.mahidol.ac.th](http://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 : [gradthai@mahidol.ac.th](mailto:gradthai@mahidol.ac.th)**