Admission Number

2 1 2 8 M G 0 0
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Master of Science Programme in Materials Science and Engineering (International Programme)

หลักสูตร วิทยาศาสตรมหาบัณฑิต สาขาวิชา วิทยาศาสตร์และวิศวกรรมวัสดุ (หลักสูตรนานาชาติ)

Faculty of Science

**คณะวิทยาศาสตร์** 

## Expected number of students to be accepted all year round : 10 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 3.00;
- have a TOEFL score of at least 480. TOEFL computer-based score of 157, TOEFL Internetbased score of 54, or IELTS score of 4.5 or pass the English Proficiency Examination arranged by the Faculty of Graduate Studies. For those who already hold a valid English score, please submit its certificate along with all application documents.

#### Curriculum Structure

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

Required courses	Credit
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)
Elective Courses	
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)	
Thesis 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

# **Required Documents**

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

- Two (2) recent photographs (1x1 inch in size)
- A copy of an applicant's degree certificate or a letter of graduation certification 2 copies (for an applicant with a degree completion)
- A letter certifying that an applicant is currently in the final year prior to graduation 2 copies (for an applicant seeking for a degree)
- A detailed transcript of a degree (for an applicant with a degree completion) 2 copies
- A grade report with course names and grades received from the first to the current 2 copies

semester prior to graduation

A copy of identification card 2 copies

2 copies

- A copy of house registration certification
- A copy of Certificate of English score: TOEFL/IELTS/MU-Test (if any). See detail here: 2 copies http://www.grad.mahidol.ac.th/grad/academicinfo/engstandard2553\_th.php
- A copy of proof of payment.

Submitting documents via online admission system.

- All documents must be in <u>pdf format</u> (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.

- Asst. Prof. Teerakiat Kerdcharoen (E-mail : teerakiat.ker@mahidol.ac.th) Room B400, Biology Building, Floor 4, Department of Physics, Faculty of Science. Tel : 0 2201 5471 Fax : 0 2644 5426
- 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

Mrs. Saijai Pengoun(E-mail : saijai.pen@mahidol.ac.th)Room B400, Biology Building, Floor 4,Multi-disciplinary Unit, Faculty of Science.Tel.: 0 2201 5471Fax.: 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 : gradthai@mahidol.ac.th