**Admission Number** 



Doctor of Philosophy Programme in Medical Technology (International Programme)

หลักสูตร ปรัชญาดุษฎีบัณฑิต สาขาวิชา เทคนิคการแพทย์ (หลักสูตรนานาชาติ) (ภาคปกติ)

Faculty of Medical Technology

**คณะเทคนิคการแพทย์** 

Expected number of students to be accepted all year round : 15 Students

# Admission Requirements

Ph.D. by research only

# A candidate must:

- have a Bachelor's degree in Science (Medical Technology) or other related sciences with honors or a Master's degree in Science (Medical Technology) or other related sciences with a minimum grade point average of 3.5;
- have a TOEFL score of at least 500, TOEFL computer-based score of 173, TOEFL Internet-based score of 61, or IELTS score of 5.
   Those who do not have any of the test scores specified above will have to take the English
- Proficiency Examination of the Faculty of Graduate Studies on the specified examination day.
  In case your qualification does not match to the admission criteria, candidates must prior attach A Requesting Form for Examination" approved by the program director. The form must

be submitted before making the application. Kindly download here: http://www.grad.mahidol.ac.th/grad/admission/form th.php

Exemptions from the above conditions may be granted by the Programme Committee under exceptional circumstances.

### Ph.D. by course work and research

### A candidate must :

- have a M.Sc. in Medical Technology or other related field with a minimum grade point average of 3.50; or a B.Sc. in Medical Technology or other related fields with exceptional qualities (with honors);
- have a TOEFL score of at least 500, TOEFL computer-based score of 173, TOEFL Internet-based score of 61, or IELTS score of 5.

Those who do not have any of the test scores specified above will have to take the English Proficiency Examination of the Faculty of Graduate Studies on the specified examination day.

3. In case your qualification does not match to the admission criteria, candidates must prior attach A Requesting Form for Examination" approved by the program director. The form must be submitted before making the application. Kindly download here: http://www.grad.mahidol.ac.th/grad/admission/form th.php

Exemptions from the above conditions may be granted by the Programme Committee under exceptional circumstances.

Written Examination (Applicants must attend the examination date accurately to your admission round.)

First Round		Second Round		
January 17, 2015		May 16, 2015		
Subjects for examination	Time	Subjects for examination	Time	
1. English	8.30 - 11.30 a.m.	1. English	8.30 - 11.30 a.m.	
2. General Knowledge	11.30 - 12.30 p.m.	2. General Knowledge	11.30 - 12.30 p.m.	
Examination Place Mahidol University, Salaya, Nakhonpathom more details: www.grad.mahidol.ac.th or Announcement at Faculty of Graduate Studies branches.				

## **Curriculum Structure**

	Credit		
Plan 1			
holding a Bachelor's degree in Science (Medical Technology) or in other related sciences with honors.			
Thesis	72		
holding a Master's degree in Med. Tech. or in other related sciences with GPA not less than 3.5.			
Thesis	48		
Plan 2			
holding a Master's degree in Med. Tech. or in other related sciences for less than 5 years			
Required courses	6		
Elective courses no less than	6		
Thesis	36		
holding a Master's degree in Med. Tech. or in other related sciences for longer than 5 years			
Required courses	10		
Elective courses no less than	15		
Thesis	36		
holding a Bachelor's degree in Med. Tech. or in other related sciences			
Required courses	10		
Elective courses no less than	15		
Thesis	48		

Required Courses	Credit		
For Bachelor's degree			
SCID 500 Cell and Molecular Biology	3(3-0-6)		
MTID 601 Clinical Laboratory Administration	2(1-2-3)		
MTID 605 Research Methodology	3(2-2-5)		
MTID 613 Advanced Seminar	2(2-0-4)		
holding a Master's degree in Med. Tech. or in other related sciences for longer than 5 years			
SCID 500 Cell and Molecular Biology	3(3-0-6)		
MTID 601 Clinical Laboratory Administration	2(1-2-3)		
MTID 605 Research Methodology	3(2-2-5)		
MTID 613 Advanced Seminar	2(2-0-4)		
holding a Master's degree in Med. Tech. or in other related sciences for less than 5 y			
MTID 604 Selected Topic in Medical Technology	2(2-0-4)		
MTID 608 Current Diagnostic Technology and Future Trends	2(2-0-4)		
MTID 613 Advanced Seminar	2(2-0-4)		
Elective Courses	2(2 0 1)		
MTID 506 Design and Construction of Basic Clinical Laboratory Instrument	4(1-6-5)		
MTID 513 Digital Electronics	2(1-2-3)		
MTID 515 Clinical Laboratory Science	3(3-0-6)		
MTID 606 Current Technology in Molecular Biology	2(2-0-4)		
MTID 607 Internship in Medical Technology Laboratory	5(0-15-5)		
MTID 609 Research and Technology Management	2(2-0-4)		
MTID 610 Independent Selected Topics in Applied and Biomedical Technology	1(1-0-2)		
MTID 611 Population Health and Community Medical Technology	3(2-2-5)		
MTID 612 Bioinformatics and Community Health	2(1-2-3)		
MTCH 601Advanced Clinical Chemistry	4(3-2-7)		
MTCH 607 Advanced Clinical Toxicology	2(1-2-3)		
MTCH 609 Clinical Nutrition	1(1-0-2)		
MTCH 610 Experimental Methods and Instruments in Clinical Chemistry	2(1-2-3)		
MTCH 611 Medical Molecular Genetics	2(2-0-4)		
MTCH 612 Selected Topics in Clinical Chemistry	1(1-0-2)		

MTCH 613 Biosensors in Clinical Chemistry	1(1-0-2)	
MTMS 502 Current Topics in Hematology	2(2-0-4)	
MTMS 605 Blood Bank Techniques and Immunohematology	2(1-2-3)	
MTMS 609 Advanced Clinical Microscopy	4(2-4-6)	
MTMS 612 Advanced Medical Genetics	2(2-0-4)	
MTMI 601 Advanced Clinical Microbiology	3(2-2-5)	
MTMI 604 Current Methods in Clinical Immunology	2(1-2-3)	
MTMI 606 Current Methods in Clinical Microbiology	2(1-2-3)	
MTMI 608 Enzymes and Microbial Products	1(1-0-2)	
MTMI 614 Advance in Antimicrobial Agents and Drug Resistance	1(1-0-2)	
MTMI 610 Selected Topics in Molecular Microbiology	1(1-0-2)	
MTMI 611 Cells and Tissue Culture Techniques	1(0-2-1)	
MTMI 612 Selected Topics in Food Microbiology	1(1-0-2)	
MTMI 613 Independent Selected Topics in Microbiology	1(1-0-2)	
MTPR 606 Selected Topics in Medical Parasitology and Medical Entomology	2(2-0-4)	
Thesis Plan 1		
For Master's degree MTID 898 Dissertation	48(0-192-0)	
For Bachelor's degree MTID 899 Dissertation	72(0-288-0)	
Plan 2 For Master's degree MTID 699 Dissertation	36(0-144-0)	
For Bachelor's degree MTID 799 Dissertation	48(0-192-0)	
* These May Change in Cases Where There are Suggestions for The Improvement of The Curriculum		

#### **Concept Paper Presentation**

For foreign applicants who apply through the Internet from abroad.

#### Additional advantages of the programme

The Doctor of Philosophy Programme in Medical Technology of the Faculty of Medical Technology provides advanced courses and researches in a broad range of disciplines in medical technology and related sciences. The Faculty collaborates with leading universities and institutions both nationally and internationally. Almost all of the students have the opportunity to take some course works or part of their researches at oversea collaborating institutions.

### **Details of Scholarships**

- 1. Scholarship of the 60<sup>th</sup> Year Supreme Reign of His Majesty King Bhumibol Adulyadej.
- 2. Funding from the Oversea Collaborative Institutions and other international agencies.
- 3. Grants from Commission on Higher Education.
- 4. Graduate Scholarship of the Faculty of Medical Technology, Mahidol University.
- 5. Other Funding from the Faculty of Graduate Studies, Mahidol University.

### **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 Those who early submit a valid English score prior to the examination will be exempt from English test on the examination date.
- 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. Lecturer in the Universities and Institutions those related to Sciences and Technologies.
- 2. Researchers in both public and private sector.

Further information may be obtained from the Director of Graduate Studies, Medical Technology :

- Prof. Virapong Prachayasittikul (E-mail : virapong.pra@mahidol.ac.th) Room 805-806 , Science and Technology Building ,Floor 8 , Department of Clinical Microbiology and Applied Technology Faculty of Medical Technology, Mahidol University, Salaya Tel. : 0 2441 4378 Fax. : 0 2441 4380
- Asst. Warawan Eiamphungporn (E-mail : warawan.eia@mahidol.ac.th) Room 721, Science and Technology Building ,Floor 7 , Center for Innovation Development and Technology transfer Faculty of Medical Technology, Mahidol University, Salaya Tel. : 0 2441 4371 ext. 2718 Fax. : 0 2441 4380

### **Program Coordinator**

Mrs.Jaroonsri Boonruang (E-mail : jaroonsri.boo@mahidol.ac.th) Room 842, Science and Technology Building, Floor 8, Education Faculty of Medical Technology, Mahidol University, Salaya Tel. : 02 441 4371-8 ext.2724 Fax. : 02 441 4380

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