#### **Admission Number**

2	1	1	9	D	G	0	0

# Doctor of Philosophy Programme in Toxicology (International Programme)

# Faculty of Science

# Department of Toxicology

## **Admission Requirements**

#### A candidate must:

- The applicants must hold a Bachelor's degree in Medicine, Dentistry, Veterinary Medicine,
  Veterinary Science, Pharmaceutical Science, any Science discipline (e.g. Biology, Chemistry)
  or an equivalent or one of the allied Health Sciences with a minimum GPA of 3.50 from Institutes
  approved by the Office of the Higher Education Commission or
- 2. The applicants must hold Master Degree or equivalent from Institutes approved by the Office of the Higher Education Commission Sciences with a minimum GPA of 3.50
- 3. have a TOEFL ITP score of at least 500, TOEFL Internet-based score of 61 or IELTS score of 5.

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

## **Curriculum Structure**

	Credit
Plan 1	
For students with Master's degree in Toxicology	
Thesis	48
Plan 2	
For students with Bachelor's degree	
Required Courses	19
Elective Courses	5
Thesis	48
For students with Master's degree in related fields	
Required Courses	6
Elective Courses	6
Thesis	36

			Credit				
Require	Required Courses						
For students with Bachelor's degree							
SCID	502	Cell Science	2(2-0-4)				
SCID	503	Systemic Bioscience	3(3-0-6)				
SCID	516	Biostatistics	3(3-0-6)				
SCID	518	Generic Skills in Science Research	1(1-0-2)				
SCTX	603	Experimental Methods in Toxicology	1(0-3-1)				
SCTX	604	Molecular Toxicology and Genetic	2(2-0-4)				

SCTX	628	Fundamental of Toxicology	3(3-0-6)				
SCTX	629	Systemic Toxicology	2(2-0-4)				
SCTX	691	Seminar in Toxicology I	1(1-0-2)				
SCTX	692	Seminar in Toxicology II	1(1-0-2)				
For students with Master's degree in related fields							
SCID	516	Biostatistics	3(3-0-6)				
SCID	518	Generic Skills in Science Research	1(1-0-2)				
SCTX	604	Molecular Toxicology and Genetic	2(2-0-4)				
For stud	dents wi	th Master's degree in Toxicology					
Students must register for courses SCTX 691 Seminar in Toxicology I and SCTX 692 Seminar in Toxicology II The non-credit (Audit)							
Elective	Course	es					
SCID	500	Cell and Molecular Biology	3(3-0-6)				
SCID	505	Systematic Ecology and Disease Emergence	3(3-0-6)				
SCID	507	Microscopic Technique	1(0-2-1)				
SCID	508	Biomolecular and Spectroscopy Techniques	1(0-2-1)				
SCID	509	Separation Techniques	1(0-2-1)				
SCID	510	Immunological Methods	1(0-2-1)				
SCID	511	Gene Technology	1(0-2-1)				
SCID	512	Receptor Binding and Enzyme Kinetic Assays	1(0-2-1)				
SCID	513	Anjmal Cell Culture Techniques	1(0-2-1)				
SCID	514	Animal Experimentation in Biomedical Research	1(0-2-1)				
SCTX	633	Clinical Toxicology	2(2-0-4)				
Thesis							
SCTX	699	Dissertation	36(0-108-0)				
SCTX	799	Dissertation	48(0-144-0)				
SCTX	898	Dissertation	48(0-144-0)				
* These may change in cases where there are suggestions for the improvement of the curriculum							

Strength and Special Features of Graduate Program in Toxicology, Faculty of Science, Mahidol University, Bangkok, Thailand

# Strength/Strategic Advantages

## **Teaching and Learning**

- Taking teaching course across institutes: Mahidol University and Chulabhon Graduate Institute

#### **Research Collaboration: National and International**

- Collaborative research activity and supervisors from colleagues within Faculty of Science and other institutes
  - Within Faculty of Science: Pharmacology, Anatomy, Physiology, Pathobiology
  - Between Faculties: Faculty of Science and Faculty of Medicine Ramathibodi Hospital
- 2. The MOU and collaboration between Faculty of Science and Faculty of Graduate Studies with other Institutes (USA, Australia, Japan, student's own expense or grant, no bench fee) allowing competent students to have to present their research or being trained abroad

## **Details of Scholarship**

- 1. Scholarship of the 60<sup>th</sup> Year Supreme Reign of His Majesty King Bhumibol Adulyadej.
- 2. Faculty of Science Teaching Assistantship.
- 3. Science Achievement Scholarship.
- 4. Research support for materials for each student.
- 5. Research Assistantship (Depending on supervisor)
- 6. Partial support scholarship.

#### **Additional Information**

- 1. All classes in the Program are conducted in English.
- Each faculty member, either from Faculty of Science or Faculty of Medicine Ramathibodi Hospital, is a leader who involves in research area including impact of chemicals on human health, molecular mechanisms of biological and toxicological actions of chemicals, factors modulating health and environmental impact of chemicals including toxicogenomics.
- 3. Textbooks to support the research initiatives of graduate students are available.
- 4. The results of the research activities conducted by the faculty are publicized through international symposia and publications which are higher in number and impact than those of other institutes offering similar graduate programs.

Visit: http://www.sc.mahidol.ac.th/MDU/

Select: Toxicology Program

## Special features

- Graduate education is tightly integrated with a variety of research areas and activities and opportunity to take internationally-recognized research training course with the Inter-University Program;
- Research facility and small classes conducted by approachable faculty members who are eager to enhance students' graduate education experience;
- 3. Internationally-recognized faculty members and research output;
- A partial or full support scholarship (depending on the condition) from Faculty of Science, Mahidol University and the Center for Toxicology, Environmental Health and Management of Toxic Chemicals (ETM);

### **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.
- Detail of English Competency Standard for Admission: http://www.grad.mahidol.ac.th/en/current-students/language-center.php
- 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 <u>pdf format</u> (maximum size 2 MB)
- Recent photograph must be in jpeg format only (maximum size 2 MB)

#### Job option after graduation

- Experts in Toxicology (Toxicologist)
- Scientist, researcher, academic staff in both governmental and private institutes

# Further information may be obtained from the Director of Graduate Studies, Toxicology,

1. Assoc.Prof.Krongtong Yoovathaworn (E-mail: krongtong.yoo@mahidol.ac.th)

Room B.400, Biology Building, Floor 4,

Department of Toxicology, Faculty of Science.

Tel: 0 2201 5471 Fax: 0 2644 5426

2. Asst.Prof.Artthi Chairoungdua (E-mail: artthi.cha@mahidol.ac.th)

Room PR.415, PR. Building, Floor 4,

Department of Physiology, Faculty of Science.

Tel: 0 2201 5615-9

# **Program Coordinator**

Prof.Skorn Mongkolsuk (E-mail: skorn.mon@mahidol.ac.th)

Room B.400, Biology Building, Floor 4,

Department of Physiology, Faculty of Science.

Tel: 0 2201 5471

**Notes** 

1. The programme of Toxicology requires students to study the pre - requisite course:SCID 500 Cell and Molecular Biology 3 Credits

2. For more 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