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Doctor of Philosophy Programme in Toxicology (International Programme)

หลักสูตร ปรัชญาดุษฎีบัณฑิต

สาขาวิชา พิษวิทยา (หลักสูตรนานาชาติ) (ภาคปกติ)

Faculty of Science

Department of Toxicology

คณะวิทยาศาสตร์

ภาควิชา พิษวิทยา

Expected number of students to be accepted all year round : 10 Students

Admission Requirements

A candidate must:

1. 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 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.

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
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 students with 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 Courses			
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 Chulabhorn Graduate Institute

Research Collaboration: National and International

1. 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 60th 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.
2. 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

1. 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;
2. 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;
4. 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 :

- Two (2) 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) 2 copies
- A letter certifying that an applicant is currently in the last semester prior to graduation (for an applicant seeking for a degree) 2 copies
- 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 semester prior to graduation 2 copies
- A copy of identification card 2 copies
- A copy of house registration certification 2 copies
- A copy of proof of payment.

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

- 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. **Prof.Pawinee Piyachaturawat** (E-mail : pawinee.piy@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. **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

Program Coordinator

Asst.Prof.Arthit Chairoungdua (E-mail : arthit.cha@mahidol.ac.th)
Room B.400, Biology Building, Floor 4,
Department of Toxicology, Faculty of Science.
Tel: 0 2201 5471 Fax : 0 2644 5426

- 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 : gradthai@mahidol.ac.th**