Doctor of Philosophy Programme in Molecular Medicine (International Programme)
Faculty of Science, Faculty of Medicine, Ramathibodi Hospital, Faculty of Dentistry,
Faculty of Tropical Medicine, Faculty of Graduate Studies

Admission Requirements

A candidate must:

Plan 1

1. Candidate must hold or is expected to hold a Bachelor’s degree of Science in the discipline of Biological or Life Science, with a minimum GPA of 3.25.
2. Candidate must hold a Master’s degree of Science, with a minimum GPA of 3.50.
3. Candidate graduated from School of Medicine or School of Dentistry, with a minimum GPA of 3.00.
4. Candidate graduated from School of Pharmacy or Veterinary Medicine, with a minimum GPA of 3.25.
5. Candidates who are currently studying in Ph.D/M.D. of Ph.D/D.D.S. program provided that they have a GPA of no less than 3.00 with approval from Doctoral Program Committee and Dean of Faculty of Graduate Studies.
6. have a TOEFL ITP score of at least 500, TOEFL Internet-based score of 61 or IELTS score of 5.

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

Exceptions to the above mentioned conditions can be made only by the Programme Graduate Administrative Committee and the Dean of the Faculty of Graduate Studies, Mahidol University

Plan 2

1. Candidate must hold or is expected to hold a Bachelor’s degree of Science in the discipline of Biological or Life Science, with a minimum GPA of 3.25.
2. Candidate must hold a Master’s degree of Science, with a minimum GPA of 3.50.
3. Candidate graduated from School of Medicine or School of Dentistry, with a minimum GPA of 3.00.
4. Candidate graduated from School of Pharmacy or Veterinary Medicine, with a minimum GPA of 3.25.
5. Candidates who are currently studying in Ph.D/M.D. of Ph.D/D.D.S. program provided that they have a GPA of no less than 3.00 with approval from Doctoral Program Committee and Dean of Faculty of Graduate Studies.
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# Curriculum Structure

## Plan 1

### For students with Master's degree

- Thesis no less than 48

### For students with Bachelor's degree

- Thesis no less than 72

## Plan 2

### For students with Master's degree

- **Required Courses**
  - SCID 502 Cell Science: 2
  - SCID 503 Systemic Bioscience: 3
  - SCID 506 Concepts of Molecular Bioscience: 2
  - SCID 518 Generic Skills in Science Research: 1
  - SCID 519 Special Content in Molecular Medicine: 3
  - SCID 624 Molecular Medicine Seminar I: 1
  - SCID 625 Molecular Medicine Seminar II: 1

- **Elective Courses** no less than 2

- Thesis: 36

### For students with Bachelor's degree

- **Required Courses**
  - SCID 502 Cell Science: 2
  - SCID 503 Systemic Bioscience: 3
  - SCID 506 Concepts of Molecular Bioscience: 2
  - SCID 513 Animal Cell Culture Techniques: 1
  - SCID 518 Generic Skills in Science Research: 1

- **Elective Courses** no less than 12

- Thesis: 48

## Credit Plan 1

### For students with Master's degree

- SCID 898 Dissertation: 48

### For students with Bachelor's degree

- SCID 899 Dissertation: 72

## Qualifying Examination

1. Students are required to assess the qualifying examination availability and the ability to have a thesis proposal.
2. Students who fail to qualifying examination for an excuse to have time to apply for re-examination excuse for an exam with the next semester since the first examination.
**Elective Courses**  
*For students with Bachelor's degree*

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCID 500</td>
<td>Cell and Molecular Biology</td>
<td>3(3-0-6)</td>
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<tr>
<td>SCID 507</td>
<td>Microscopic Technique</td>
<td>1(0-2-1)</td>
</tr>
<tr>
<td>SCID 508</td>
<td>Biomolecular and Spectroscopy Techniques</td>
<td>1(0-2-1)</td>
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<td>SCID 509</td>
<td>Separation Techniques</td>
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</tr>
<tr>
<td>SCID 510</td>
<td>Immunological Methods</td>
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<tr>
<td>SCID 511</td>
<td>Gene Technology</td>
<td>1(0-2-1)</td>
</tr>
<tr>
<td>SCID 512</td>
<td>Receptor Binding and Enzyme Kinetic Assays</td>
<td>1(0-2-1)</td>
</tr>
<tr>
<td>SCID 514</td>
<td>Animal Experimentation in Biomedical Research</td>
<td>1(0-2-1)</td>
</tr>
<tr>
<td>SCID 516</td>
<td>Biostatistics</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>SCMI 602</td>
<td>Advanced Immunology</td>
<td>3(3-0-6)</td>
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<tr>
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<td>Advanced Parasitology</td>
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<td>SCMI 604</td>
<td>Advanced Virology</td>
<td>3(3-0-6)</td>
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<tr>
<td>SCPA 601</td>
<td>Cellular Pathology I</td>
<td>2(2-0-4)</td>
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<td>SCPM 611</td>
<td>Advanced Pharmacology</td>
<td>3(3-0-6)</td>
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<td>SCPS 631</td>
<td>Systems Physiology</td>
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<td>SCTX 601</td>
<td>Molecular Toxicology</td>
<td>3(3-0-6)</td>
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*For students with Master's degree*

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**Thesis**  
**Plan 1**

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<tbody>
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<td>SCID 898</td>
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<td>Dissertation</td>
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**Plan 2**

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</thead>
<tbody>
<tr>
<td>SCID</td>
<td>799</td>
<td>48(0-144-0)</td>
</tr>
</tbody>
</table>

* These May Change in Cases Where There are Suggestions for The Improvement of The Curriculum

**Details of Scholarship**
1. Institutional Strengthening Program
2. Application Form For Scholarship

**Additional advantages of the programme**
Doctor of Philosophy Programme in Molecular Medicine is a new multidisciplinary program aims to provide students with flexible and integrated approach to medical and dental disciplines using cutting edge molecular biology and genetics technologies.

**Additional information for applicants**
Students will learn molecular biology, genetics, cell technologies, bioinformatics, - ome and - omics as pharmacogenomics, metabolomics and etc ; and applied the knowledge in the diagnosis, treatment and prevention of many diseases.

**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](http://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.

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 pdf format (maximum size 2 MB)
- Recent photograph must be in jpeg format only (maximum size 2 MB)
Job option after graduation
1. A lecturer, instructor, scientist, researcher and consultant in government.
2. A research specialist in scientific products/equipment in the government or any private company.
3. An owner of a company or an organization that utilizes scientific background to assist in its success.

Further information may be obtained from the Secretary of Molecular Medicine:

1. Assoc. Prof. Sukumal Chongthammakun (E-mail: sukumal.cho@mahidol.ac.th)
   Graduate Studies Room, R Building, Floor 1, Faculty of Science.
   Tel: 0 2201 5209

2. Asst. Prof. Nathawut Sibmooh (E-mail: nathawut.sib@mahidol.ac.th)
   Room B.512, B Building, Floor 5, Department of Pharmacology, Faculty of Science.
   Tel: 0 2201 5509

Program Coordinator

Mrs. Patchara Ongard (E-mail: patchara.ong@mahidol.ac.th)
Room B.400, B Building, Floor 4, Multidisciplinary Coordinating Center.
Faculty of Science.
Tel.: 0 2201 5472 Fax.: 0 2644 5426

Notes 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: gradinter@mahidol.ac.th