Admission Number

Master of Science Programme in Cyber Security and Information Assurance
(International Programme - Special Programme)

Faculty of Information Communication Technology

Expected number of students to be accepted all year round: 20 Students

Admission Requirements

A candidate must:

1. Hold a Bachelor’s degree in computer science, information and communication technology, computer engineering, or other related areas that have taken at least 15 credits of computer courses.
2. Obtain the cumulative GPA of at least 3.00
3. Have professional experience in computer science.
4. Have a TOEFL ITP score of at least 480, TOEFL Internet-based score of 54 or IELTS score of 5 or MU GRAD TEST score of 60.

Exceptions from the above conditions may be granted by the Programme Committee and the Dean of Faculty of Graduate Studies;

Curriculum Structure

<table>
<thead>
<tr>
<th>Plan A (2)</th>
<th>Credit</th>
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<tbody>
<tr>
<td>Prerequisite Courses</td>
<td>Non-Credit</td>
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<tr>
<td>Required Courses</td>
<td>18</td>
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<tr>
<td>Elective Courses</td>
<td>not less than 6</td>
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<td>Thesis</td>
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<tr>
<th>Plan B</th>
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<tbody>
<tr>
<td>Prerequisite Courses</td>
<td>Non-Credit</td>
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</tr>
<tr>
<td>Thematic Paper</td>
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| Prerequisite Courses | Non-Credit |
| ITCS 503 | Design and Analysis of Algorithms 3(3-0-6) |
| ITCS 504 | Computer System Organization and Architecture 3(3-0-6) |
| ITCS 506 | Operating Systems 3(3-0-6) |

<p>| Required Courses | |
| ITCY 511 | Computer and Network Security 3(3-0-6) |</p>
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>ITCY 512</td>
<td>Information Security Management</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>ITCY 513</td>
<td>Cyber Ethics and Law</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>ITCY 514</td>
<td>Fraud Analysis and Detection</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>ITCY 541</td>
<td>Digital Forensics Technologies and Techniques</td>
<td>3(3-0-6)</td>
</tr>
<tr>
<td>ITCY 571</td>
<td>Information Assurance and Risk Management</td>
<td>3(3-0-6)</td>
</tr>
</tbody>
</table>

**Elective Courses**

1. **Cyber Security**
   - ITCY 531 System Hardening and Penetration Testing | 3(3-0-6)
   - ITCY 534 Reverse Engineering and Vulnerability Analysis | 3(3-0-6)
   - ITCY 543 Network Forensics | 3(3-0-6)
   - ITCY 544 Mobile Security | 3(3-0-6)
   - ITCY 545 Cloud Security | 3(3-0-6)
   - ITCY 561 Ethical Hacking | 3(3-0-6)
   - ITCY 562 Intrusion Detection and Prevention | 3(3-0-6)
   - ITCY 591 Special Topics in Cyber Security and Forensics | 3(3-0-6)

2. **Information Assurance**
   - ITCY 551 Application of Cryptography | 3(3-0-6)
   - ITCY 552 Authentication Technology Management | 3(3-0-6)
   - ITCY 553 Secure Software Design | 3(3-0-6)
   - ITCY 572 Information and Social Network Security | 3(3-0-6)
   - ITCY 573 E-Services Security Management | 3(3-0-6)
   - ITCY 581 Incident Response Management | 3(3-0-6)
   - ITCY 592 Special Topics in Information Assurance | 3(3-0-6)

**Thesis (Plan A (2))**

- ITCY 698 Thesis | 12(0-36-0)

**Thematic Paper (Plan B)**

- ITCY 697 Thematic Paper | 6(0-18-0)

* These may change in cases where there are suggestions for the improvement of the curriculum

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**Addition advantages of the program**

1. Unique and modern academic program
2. Connections with many reputable partners
3. Good opportunities for careers in AEC
4. One year program
Details of Scholarships
Partial scholarships are available for exceptional applicants.

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 5 of 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:

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. Computer Technician.
7. Cyber Security and Information Assurance Researcher.
Further information about the programme and scholarship may be obtained from the Director of Graduate Studies, Cyber Security and Information Assurance:

1. **Assoc. Prof. Damras Wongsawang**  (E-mail: damras.won@mahidol.ac.th)
   Computing Center Building, Faculty of Information and Communication Technology, Phayathai campus, Rama 6 Road.
   Tel.: 0 2354 4333 (Phayathai campus)  Fax.: 0 2354 7333
   0 2441 0909 (Salaya campus)  Fax.: 0 2849 6099

2. **Assoc. Prof. Jarernsri L. Mitrpanont**  (E-mail: jarernsri.mit@mahidol.ac.th)
   Computing Center Building, Faculty of Information and Communication Technology, Phayathai campus, Rama 6 Road.
   Tel.: 0 2354 4333 (Phayathai campus)  Fax.: 0 2354 7333
   0 2441 0909 (Salaya campus)  Fax.: 0 2849 6099

Program Coordinator

1. **Miss. Thunyathorn Suthijaroen**  (E-mail: thunyathorn.sut@mahidol.ac.th)
   Room CC101, Computing Center Building, Floor 1, Faculty of Information and Communication Technology, Phayathai campus, Rama 6 Road.
   Tel.: 0 2354 4333  Fax.: 0 2354 7333

Notes 1. Students who have inefficient knowledge in computer science may have to study some fundamental subjects in computer science according to program committee’s suggestion as below. courses:
   1. ITCS 503  Design and Analysis of Algorithms  3 Credits
   2. ITCS 504  Computer Systems Organization and Architecture  3 Credits
   3. ITCS 506  Operating Systems  3 Credits

2. For more education information:  http://www.grad.mahidol.ac.th
                               :  www.ict.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
Faculty of ICT, Tel. 0 2354 4333