

# M.S. CS

## MASTER OF SCIENCE IN COMPUTER SCIENCE

### 2-YEAR PROGRAM, THESIS AND NON - THESIS OPTIONS

The Master of Science Program in Computer Science aspires to produce graduates who are capable of working efficiently in technology oriented environment. In order to meet this philosophy, the curriculum emphasizes:

- True understanding of the principles of major topics in Computer Science.
- Analytical approaches in solving problems and decision making based on technology and research methodology.
- Innovative skills to create research work that is worthy in both academic and computer applications.



Study at **Hua Mak Campus**

### ADMISSION SCHEDULE 2017 / 2018

Admission Schedule	Semester 1/2017 (August - December 2017)	Semester 2/2017 (January - May 2017)	Semester 1/2018 (August - December 2018)	Semester 2/2018 (January - May 2019)
Application Filling Period	July 21, 2017	December 16, 2017	July 21, 2018	December 15, 2018
AU English proficiency Test	July 22, 2017	December 17, 2017	July 22, 2018	December 16, 2018
Examination Interview	July 22, 2017	December 20, 2017	July 24, 2018	December 18, 2018
AU Entrance Results	July 24, 2017	December 23, 2017	July 26, 2018	December 20, 2018
Registration Period	July 26 - August 11, 2017	January 3-13, 2018	July 30 - August 11, 2018	January 7-14, 2019
Instruction Begins	August 7, 2017	January 8, 2018	August 7, 2018	January 7, 2019

### ADMISSION REQUIREMENTS QUALIFICATION FOR ADMISSION

The following admission requirements (recommended) for any prospective students to enter the program.

1. Bachelor's degree from an accredited institution. The applicants must graduate from the following academic fields: Computer Science, Information Technology, Telecommunications Science, Engineering or related field.
2. Three recommendation letters from lecturers or employers
3. Required GPA of at least 2.5

### ENTRANCE REQUIREMENTS

1. A completed application form
2. Official transcript of the previous university attended (2 copies)
3. Bachelor's degree certificate (2 copies)
4. Citizen Identification Card and Residence Registration - For Thai Applicants (2 copies)
5. Passport - For Non-Thai Applicants (2 copies)
6. Photographs formal attire, not in graduation gown (Six, 1x1-inch size)
7. Letter of recommendation from former instructors or employers at the time of the application (2 letters)

Note: All documents must be endorsed with signature and submitted in person within the last day application period. Otherwise, the application will not be considered and the applicant will not be allowed for the Admission interview.

**DURATION:** 2 years

### ADMISSION FEE

AU English Proficiency Test Baht 500  
 and Interview Baht 500

### STUDY SYSTEM

1<sup>st</sup> semester August - December  
 2<sup>nd</sup> semester January - May

### VENUE & CLASS HOURS

» **Hua Mak Campus**, Ramkhamhaeng 24 Road  
 Mon. - Fri. 6.30 P.M. - 9.30 P.M.  
 Sat. - Sun. 9.00 A.M. - 5.00 P.M.

### GRADUATION REQUIREMENTS

#### Plan A : Coursework and Thesis

- Have completed all the courses of the curriculum.
- Have obtained a cumulative grade point average of at least 3.00.
- Have passed the thesis defense.
- Have a publication or obtain an acceptance of a publication related to the content of the thesis in a journal or an international conference proceeding and which is approved by the Academic Committee of the department.
- Have obtained library and financial clearance from the University.
- Have demonstrated good behavior and discipline.

#### Plan B: Coursework and Independent Study

- Have completed all the courses of the curriculum.
- Have obtained a cumulative grade point average of at least 3.00.
- Have passed the comprehensive examination.
- Have passed the project presentation.
- Have obtained library and financial clearance from the University.
- Have demonstrated good behavior and discipline.

### EXEMPTION

The AU English Proficiency Test can be exempted depending on which of the following conditions you satisfy.

- a TOEFL score of (iBT) 90 or an IELTS (Academic) score of at least 6.5 (Validation: Two years)
- a Bachelor's degree or a higher degree from native English speaking countries (e.g. USA, Canada, UK, and New Zealand)

### APPLICATIONS

#### Hua Mak Campus

Admissions Center "P" Building, 1<sup>st</sup> floor, Ramkhamhaeng 24 Road, Bangkok 10240 Thailand

**Office hours:**  
 Monday - Friday 08:30 A.M. - 05:00 P.M.  
 Saturday 08:00 A.M. - 04:30 P.M.  
 Sunday 08:00 A.M. - 02:00 P.M.

#### ABAC City Campus

ABAC City Campus, ZEN @Central World, Level 14 4,4/5 Rajdamri Rd., Phatumwan Bangkok 10330 Thailand

**Office hours:**  
 Monday - Friday 10:00 A.M. to 06:00 P.M.  
 Saturday - Sunday 10:00 A.M. to 06:00 P.M.

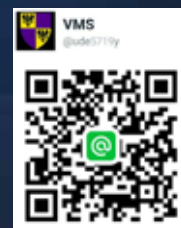
#### Suvarnabhumi Campus

Admissions Center SM115, 88 Moo 8 Bang Na-Trad Km.26, Bangsathong, Samuthprakarn, Thailand 10540

**Office hours:**  
 Monday - Friday 08:30 A.M. to 05:00 P.M.

# M.S. CS

## MASTER OF SCIENCE IN COMPUTER SCIENCE



### STUDY PLAN

#### Thesis Option (Plan A)

Preparatory Courses	non-credits
Required Courses	16 credits
Elective Courses	9 credits
Thesis	12 credits
<b>Total</b>	<b>37 credits</b>

#### Non – thesis Option (Plan B)

Preparatory Courses	non-credits
Required Courses	16 credits
Elective Courses	18 credits
Project	3 credits
<b>Total</b>	<b>37 credits</b>

### YEAR 1

#### Semester 1

SC 6210	Principles of the Theory of Computation
SC 6212	Programming Languages and Compiler
SC 6222	Operating Systems Theory

#### Semester 2

SC 6221	Principles of Database Management Systems
SC 6231	Advanced Computer architectures
SC 6800	Research Planning and Management
	One Elective Course

### YEAR 2

#### Semester 1

Plan A	Two Elective Courses + SC 7000 Thesis
Plan B	Three Elective Courses

#### Semester 2

Plan A	SC 7000 Thesis
Plan B	Two Elective Courses + SC6900 Master Project

### CURRICULUM

#### Preparatory Courses

ES 5001	English for Graduate Study
SC 5211	Computer Programming & Data Structure

#### Required Courses

SC 6800	Research Planning & Management
SC 6210	Principles of the Theory of Computation
SC 6212	Programming Languages and Compiler
SC 6221	Principles of Database Management Systems
SC 6222	Operating Systems Theory
SC 6231	Advanced Computer Architectures

### ELECTIVE COURSES

SC 6310	Design and Analysis of Algorithms
SC 6311	Combinatorics and Geometric Algorithms
SC 6318	Computer Graphics and Animation
SC 6319	Computer Network and Internet Security
SC 6323	Information Retrieval
SC 6324	Software Engineering
SC 6325	Object-Oriented Paradigm
SC 6331	Grid Computing
SC 6360	Artificial Intelligence
SC 6361	Computational Intelligence
SC 6362	Data Mining
SC 6363	Knowledge Engineering and Uncertainty
SC 6364	Machine Learning
SC 6365	Natural Language Understanding and Processing
SC 6399	Graduate Seminar in Computer Science
SC 6405	Recommender Systems
SC 6400-99	Selected Topics in Computer Science
SC 6500-99	Directed Individual Study in Computer Science

#### Independent study

SC6900	Master Project
--------	----------------

#### Thesis

SC7000	Thesis
--------	--------

### ESTIMATED FEES

#### Fee Description

	2-Years (4 Semesters)	
	THB	US\$
<b>Enrollment Fees:</b>		
Matriculation Fee (Thai Students)	9,000	273
Matriculation Fee (non-Thai Students)	21,500	652
Student's Activity Fee	7,000	213

#### Registration Fees

Tuition Fee (THB 4,000 x 37 credits)	148,000	4,485
University Fee (THB 17,900 x 4 Semesters)	71,600	2,170
Annual Internet & Access Control Fee (THB 2,400/Year)	4,800	146
Annual Health & Life Insurance Fee (non-Thai Students, THB 5,000/Year)	10,000	304

<b>Approximate Total for Thai Students</b>	<b>240,400</b>	<b>7,285</b>
<b>Approximate Total for non-Thai Students</b>	<b>262,900</b>	<b>7,967</b>

#### Note:

- Tuition fee doesn't cover the followings:
  - Admission fee
  - Text books
  - AU Academic Writing Course (15,000 THB)
  - Tuition fee for non-credit courses
  - Thesis Final Defense
- The fees are subject to change at the university's discretion without prior notice.
- Currency exchange rate: US \$1 = THB 33

### IMPORTANT

The provisional information statements set forth in this catalog should not be construed as the basis of any contract between a student and this institution. As such Assumption University reserves the right to change any provision listed in this catalog, including, but not limited to academic requirements for graduation. Every effort through the Office of Graduate Studies, will be made to keep students advised of any such changes.

*The University Registrar*

Last updated: August 2017

### UNIVERSITY ADMISSIONS CENTER (UNIAD)

#### HUA MAK CAMPUS

Tel. +66 (2) 300 4543-62 Ext.1244  
Tel. +66 (2) 719 1929  
Website : [www.grad.au.edu](http://www.grad.au.edu)  
E-mail : [gradadmission@au.edu](mailto:gradadmission@au.edu)

#### ABAC CITY CAMPUS

Zen @ Central World, 14<sup>th</sup> floor.  
E-mail : [citycampus@au.edu](mailto:citycampus@au.edu)  
Tel: +66 (2) 1009 115-8

#### SUVARNABHUMI CAMPUS

Tel. +66 (2) 723 2323



+66 (81) 815 1237

[www.grad.au.edu](http://www.grad.au.edu)

[gradadmission@au.edu](mailto:gradadmission@au.edu)