



# M.S. CS

## MASTER OF SCIENCE IN COMPUTER SCIENCE

GRADUATE SCHOOL OF SCIENCE AND TECHNOLOGY

CS @ Assumption University

### Creative dreams built on Solid foundation

Are you one of us who genuinely believe in building something that matters? Something that shapes up the future of our world? Does your career goal fall into one of the following categories?

- o An INNOVATOR whose passion is to develop cutting-edge technologies that can impact our world in the most disruptive way.
- o A SOFTWARE ENGINEER with the goal of becoming a part of any large, influential corporations in the international arena.
- o A TECH-ENTREPRENEUR with the dream of successfully starting up a business in the computing industry that can be worth a fortune.



### Why MSCS @ Assumption University?

At the Department of Computer Science, we believe in many things.

We believe in the science that creates positive impacts to the world. We believe in nourishing creative minds while ensuring solid foundation of the knowledge is never compromised. We believe in the Computer Science that maintains its core values as it modernizes itself through time.

Our MSCS program is designed based on those beliefs. Our faculties are qualified experts in the field, both academically and industrially. Our curriculum, courses, and facilities are designed to foster creativity and innovativeness as students learn the core knowledge in theories and practices. And all these within a truly international environment.

### WHAT WE OFFER

#### Our Curriculum

Our curriculum provides both thesis & non-thesis options to tailor to your study plans & end goals.

#### Our Courses

#### Knowledge in modern computing technologies

Choices of elective courses are offered that meet the needs of today's technology trends, including intelligence systems, human-computer interactions & usability design, mobile & web application development, and software engineering disciplines.

#### Solid foundation in computing technology

Core courses in algorithm design, DBMS, architectures, and programming languages are also there to ensure that creativity is built on solid foundation, and that your innovations will not be just another online marketplace applications.

#### Our Faculties

Faculties are qualified experts in the academia, with many having active roles in the industry, both the commercial and public sectors. They are reachable not only in classrooms, but also in labs and research groups that you may participate in.

#### Our Community

Last but not least, we are fully an international university, with a truly international environment & a culture of business & entrepreneurial minds.

### HOW WE OFFER IT

#### DURATION: 2 YEARS

#### STUDY SYSTEM

1st semester	September - December
2nd semester	January - April
Summer	May - August

#### VENUE & CLASS HOURS

» **Hua Mak Campus**  
Mon. - Fri. 18.30 - 21.30 hrs.  
Sat. - Sun. 09.30 - 17.00 hrs.

#### GRADUATION REQUIREMENTS

The MSCS program offers 2 study plans: thesis and non-thesis options, both requiring a completion of 37 credits, and the following graduation requirements:

##### For thesis option (Plan A):

- Have completed 25 credits of coursework (6 required courses + 3 elective courses)
- Have passed a thesis defense
- Have the thesis published, or accepted for publication, in a journal or conference proceedings

##### For non-thesis option (Plan B):

- Have completed 34 credits of coursework (6 required courses + 6 elective courses)
- Have passed a comprehensive examination
- Have delivered a master project

For both Plan A & Plan B, the candidate must:

- Have a cumulative grade point average of at least 3.00
- Have demonstrated good behavior and discipline
- Have cleared all financial obligations

### Special Admission Period

To accommodate AEC2015, our semester system has been shifted in 2013, allowing a special admission by **April 30, 2014**.

Application Deadline      April 30, 2014

Registration period      April 26 - May 4, 2014

Instruction begins      May 5, 2014

### HOW TO APPLY

APPLICATION FORMS CAN BE DOWNLOADED FROM:  
<http://www.grad.au.edu>

APPLICATION FORMS ARE ALSO AVAILABLE AT:

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

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

Find more information about us, or contact us at:

<http://www.scitech.au.edu>

e-mail: [info@scitech.au.edu](mailto:info@scitech.au.edu)

#### Admission Schedules

- |                                       |                   |
|---------------------------------------|-------------------|
| § Semester 4/2013 (Special Admission) | April 30, 2014    |
| § Semester 1/2014                     | August 23, 2014   |
| § Semester 2/2014                     | December 30, 2014 |
| § Semester 3/2014                     | April 30, 2015    |

#### Admission Requirements

- ✓ Hold a bachelor degree in Computer Science or related fields from accredited academic institutions.
- ✓ Have a GPA of at least 2.50.
- ✓ Have proof of English proficiency. This can either be:
  1. 500 or higher on TOEFL (173 CBT)
  2. 625 or higher on TOEIC
  3. 5.5 or higher on IELTS

Study at **Hua Mak Campus**



**M.S. (COMPUTER SCIENCE)**

### ADMISSION SCHEDULE 2014/2015

Admission Schedule	Semester 4/2013 (May - August 2014)	Semester 1/2014 (September - December 2014)	Semester 2/2014 (January - April 2014)	Summer 3/2014 (May - August 2015)
Application Deadline	April 30, 2014	August 23, 2014	December 30, 2014	April 30, 2015
Registration period	April 26 - May 4, 2014	August 23 - 31, 2014	January 3 - 11, 2015	April 29 - May 10, 2015
Instruction begins	May 5, 2014	September 1, 2014	January 12, 2015	May 11, 2015

### STUDY PLAN

#### Thesis Option (Plan A)

Preparatory courses	non-credits
Required Courses	16 credits
Elective Courses	9 credits
Thesis	12 credits
Total	37 credits

#### Non – thesis Option (Plan B)

Preparatory courses	non-credits
Required Courses	16 credits
Elective Courses	18 credits
Project	3 credits
Total	37 credits

### 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 6400-99 Selected Topics in Computer Science  
SC 6500-99 Directed Individual Study in Computer Science

#### Independent study

SC6900 Master Project      SC7000 Thesis

### ENTRANCE REQUIREMENTS

1. A completed application form.
2. Copies of official transcript from previously attended university. (2 copies)
3. Copies of Bachelor's degree certificate (2 copies)
4. Copies of Citizenship IC or Passport information page (2 copies)
5. Six 1x1-inch photographs
6. Letters of recommendation. (2 letters)
7. Proof of English proficiency. (1 copy)

### ADMISSION & EXAMINATION FEES

Application form : Baht 500  
Admission Interview: Baht 500

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 to sit for the Admission interview.

### ESTIMATED FEES

#### Fee Description

2-Year, 4 Semesters

Enrollment fees:	THB	US\$
Matriculation Fee (non-Thai Students)	21,500	717
Student's Activity Fee	7,000	233
Photographer	100	3

### Registration Fees

Tuition Fee (THB 4000x37 credits)	148,000	4,933
University Fee (THB 17,400x4 Semesters)	69,600	2,320
Annual Internet &		
Access Contril Fee (BHT 2,400/Year)	4,800	160
Annual Health & Life Insurance Fee	10,000	333

Approximate Total for Overseas Students 261,000 8,700

Note:  
The fees are subject to change at the university's discretion without prior notice.

Study at **Hua Mak Campus**

### ABAC SCHOOL OF SCIENCE AND TECHNOLOGY

**Hua Mak Campus** Ramkhamhaeng 24 Road Bangkok 10240 Thailand  
Direct Line (66) 02 719 1079 Tel. (66) 02 300 4543 - 63 Ext. 3681, 3682 Fax: (66) 02 719 1639  
Email: [info@scitech.au.edu](mailto:info@scitech.au.edu) [www.cs.au.edu](http://www.cs.au.edu)

### UNIVERSITY ADMISSIONS CENTER (UNIAD)



HUA MAK CAMPUS  
Admissions Center  
"P" Building, 1st fl.  
Ramkhamhaeng 24 Rd., Bangkok  
Tel: (66) 02 1009 115 - 8  
Fax: (66) 02 1009 119  
E-mail: [grad@au.edu](mailto:grad@au.edu)  
[www.grad.au.edu](http://www.grad.au.edu)

ABAC CITY CAMPUS  
Zen Department Store @  
CentralWorld, 14th fl.  
Rajdamri Rd., Bangkok  
Tel: (66) 02 723 2323  
Fax: (66) 081 815 1237  
E-mail: [grad@au.edu](mailto:grad@au.edu)  
[www.grad.au.edu](http://www.grad.au.edu)

SUVARNABHUMI CAMPUS  
St. Gabriel Hall (SG15)  
Bangna Trad Rd., KM.26,  
Chiangmai  
SamutPrakan  
Tel: (66) 053 245570-5 Ext. 508  
Direct Line (66) 081 815 1237  
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