Ph.D. CS
DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

3-YEAR PROGRAM (for Master's degree holder) or
4-YEAR PROGRAM (for Bachelor's degree holder)

The Doctor of Philosophy Program in Computer Science will serve to
- Prepare researchers in the field of computer science who are capable of developing new computing technology.
- Produce highly knowledgeable university Instructors in the field of computer science whose in-depth understanding of the knowledge critical thinking, and ability to assimilate new knowledge into their instruction will lead to the development of high quality computer scientists.

Study at **Hua Mak Campus**

Admission Schedule

Admission Schedule	Semester 1/2020 (June - October 2020)	Semester 2/2020 (November - February 2021)
Application Deadline	Wed. 20 May 2020	Tue. 20 October 2020
AU EPS Test and Interview	Sat. 23 May 2020	Sat. 24 October 2020
Entrance Results	Tue. 26 May 2020	Tue. 27 October 2020
Registraton Period	1 - 5 June 2020	2 - 6 November 2020
Instruction Begines	Mon. 8 June 2020	Mon. 9 November 2020

QUALIFICATION FOR ADMISSION
Admission to the program is granted to applicants with:

1. **Type 2.1 : Coursework and Dissertation (Master's degree holder)**
   Master's degree in Computer Science or equivalent, or in other related technical fields, from the institutions accredited by the Ministry of Education, Thailand or by the official accreditation organization of the country where the institution is based.
   Type 2.2 : Coursework and Dissertation (Bachelor's degree holder)
   Bachelor's degree in Computer Science or equivalent, or in other related technical fields, from the institutions accredited by the Ministry of Education, Thailand or by the official accreditation organization of the country where the institution is based.
2. GPA of at least 3.25 on a scale of 4.0, or equivalent
3. Three recommendation letters from lecturers or employers

ENTRANCE REQUIREMENTS
1. A completed application form
2. Official transcript from the previous university attended (2 copies)
3. Master degree certificate for Type 2.1 or Bachelor degree certificate for Type 2.2
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 (3 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:
3 years for Master's degree holder /
4 years for Bachelor's degree holder

ADMISSION FEE   1,000 THB
(AU English Proficiency Test and Interview)

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)

STUDY SYSTEM
1st semester   August - December
2nd 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
Type 2.1 and 2.2: Coursework and Dissertation
- Have completed all the courses of the curriculum
- Have obtained a cumulative grade point average of at least 3.00
- Have passed the proficiency test of English
- Have passed the qualifying examination
- Have passed the dissertation defense
- Have the dissertation /part of dissertation published or obtained an acceptance of its publication in a national or international journal approved by the Academic Committee of the department. For Type 2.2, have the dissertation /part of dissertation published or obtained an acceptance of its publication in an additional international conference with peer review.
- Have obtained library and financial clearance from the University
- Have demonstrated good behavior and discipline

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CURRICULUM STRUCTURE

Type 2.1 Coursework and Dissertation
(Masters Degree Holder)

Foundation Courses	Non-Credit
Elective Courses	12 Credits
Dissertation	36 Credits
Total	**48 Credits**

Type 2.2 Coursework and Dissertation
(Bachelors Degree Holder)

Required Courses	9 Credits
Elective Courses	15 Credits
Dissertation	48 Credits
Total	**72 Credits**

STUDY PLAN FOR TYPE 2.1*

FIRST YEAR
FIRST SEMESTER
Three Elective Courses

SECOND SEMESTER
One Elective Course
Qualifying Examination

SECOND YEAR
FIRST SEMESTER
SC 9000   Dissertation

SECOND SEMESTER
SC 9000   Dissertation
Prospectus Examination

THIRD YEAR
FIRST SEMESTER
SC 9000   Dissertation

SECOND SEMESTER
SC 9000   Dissertation
Dissertation Examination

*: Applicants who do not studied some foundation courses in their previous degree will have to take them.

STUDY PLAN FOR TYPE 2.2

FIRST YEAR
FIRST SEMESTER
SC 6201   Advanced Computing Systems
SC 6202   Computability, Complexity and Algorithms
SC 6212   Programming Languages and Compiler

SECOND SEMESTER
Three Elective Courses
Qualifying Examination

SECOND YEAR
FIRST SEMESTER
Two Elective Courses
SC 9000   Dissertation

SECOND SEMESTER
SC 9000   Dissertation
Prospectus Examination

THIRD YEAR
FIRST SEMESTER
SC 9000   Dissertation

SECOND SEMESTER
SC 9000   Dissertation

FORTH YEAR
FIRST SEMESTER
SC 9000   Dissertation

SECOND SEMESTER
SC 9000   Dissertation
Dissertation Examination

COURSES

FOUNDATION COURSES (REQUIRED COURSES)
SC 6201	Advanced Computing Systems
SC 6202	Computability, Complexity and Algorithms
SC 6212	Programming Languages and Compiler

ELECTIVE COURSES
SC 6319	Computer Network and Internet Security
SC 6324	Principles of Software Engineering
SC 6360	Artificial Intelligence
SC 6362	Data Mining
SC 6365	Natural Language Understanding and Processing
SC 6399	Graduate Seminar in Computer Science
SC 6601	Cloud Computing and Big Data
SC 6602	Data Analysis and Visualization
SC 6603	Data Warehousing and Business Intelligences
SC 6604	Database Management Systems
SC 6610	Pattern Recognition and Machine Learning
SC 6611	Neural Networks and Deep Learning
SC 6612	Blockchain Technology and Cryptocurrency
SC 6613	Recommender Systems
SC 6620	Computer Graphics
SC 6621	Computer Vision
SC 6622	Augmented and Virtual Environments
SC 6630	User Interface and User Experience (UI/UX)
SC 6631	Web Technology, Applications and Security
SC 6632	Mobile Computing
SC 6640	Principles of the Theory of Computation
SC 6633	Ubiquitous Computing and Internet of Things (IoT)
SC 6400-99	Selected Topics in Computer Science
SC 6500-99	Directed Individual Study in Computer Science
SC 8311	Parallel Algorithms
SC 8322	Image Processing
SC 8323	Computational Models of Decision Making
SC 8324	Natural Language Processing
SC 8350	Computer and Data Security
SC 8354	Advanced Computer Communications
SC 8380-599	Advanced Topics in Computer Science

DISSERTATION
SC 9000	Dissertation

ESTIMATED FEES
3 YEARS

Installments	Thai Students (THB)	Non Thai Students (THB)	(US$)
1st Installments	106,300	123,800	4,127
2nd Installments	94,100	94,100	3,137
3rd Installments	109,100	114,100	3,803
4th Installments	109,100	109,100	3,637
5th Installments	84,100	89,100	2,970
6th Installments	96,100	96,100	3,203
Total	**597,600**	**625,100**	**20,837**

4 YEARS

Installments	Thai Students (THB)	Non Thai Students (THB)	(US$)
1st Installments	127,300	144,800	4,827
2nd Installments	109,100	109,100	3,637
3rd Installments	115,100	120,100	4,003
4th Installments	109,100	109,100	3,637
5th Installments	84,100	89,100	2,970
6th Installments	96,100	96,100	3,203
7th Installments	84,100	89,100	2,970
8th Installments	84,100	84,100	2,803
Total	**807,800**	**840,300**	**28,010**

VMS @ude5711y

Note:
1. The total fee above doesn't cover the followings:
   - Admission fee
   - Text books
2. The fees are subject to change at the university's discretion without prior notice.
3. Currency exchange rate: US $1 = THB 30

UNIVERSITY ADMISSIONS CENTER (UNIAD)

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