

Ph.D. CS DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

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

The Doctor of Philosophy Program in Computer Science will serve to

- Propare 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.



ADMISSION SCHEDULE 2017 / 2018

| Admission Schedule | Semester 1/2017 (August - December 2017) | Semester 2/2017 (January - May 2018) | 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 OUALIFICATION 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
- Three recommendation letters from lecturers or employers

ENTRANCE REQUIREMENTS

- 1. A completed application form
- Official transcript from the previous university attended (2 copies)
- 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)
- 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

ADMISSION FEE

Admission Fee Baht 500
AU English Proficiency Test Baht 500
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



CURRICULUM STRUCTURE

Type 2.1 Coursework and Dissertation

(Master Degree Holder)

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

Type 2.2 Coursework and Dissertation

(Bachelor 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 Flective 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

STUDY PLAN FOR TYPE 2.2 FIRST YEAR

FIRST SEMESTER

SC 6201 **Advanced Computing** Systems

Computability, SC 6202

Complexity and Algorithms

Programming Languages SC 6212

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

IMPORTANT

The provisional information statements set forth in this catalog should not be construed as The provisional information statements set form in this calating strough one constitued 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 undated: May 2018

COURSES

FOUNDATION COURSES (REQUIRED COURSES)

SC 6201 **Advanced Computing Systems** Computability, Complexity and Algorithms SC 6202 SC 6212 Programming Languages and Compiler

ELECTIVE COURSES

Computer Network and Internet Security SC 6319 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

Mobile Computing SC 6632

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

Fee Description

3-Years (6 Semesters)

| Approximate Total for Thai Students Approximate Total for non-Thai Students | 479,600 507,100 | 14,535 15,367 |
|--------------------------------------------------------------------------------|--------------------|------------------|
| Annual Health & Life Insurance Fee (non-Thai Students, THB 5,000/Year) | 15,000 | 455 |
| Annual Internet & Access Control Fee (THB 2,400/Year) | 7,200 | 219 |
| Tuition Fee (THB 7,000 x 48 credits) University Fee (THB 19,900 x 6 Semesters) | 336,000 119,400 | 10,182 3,618 |
| Registration Fees | | |
| Matriculation Fee (Indi Students) Student's Activity Fee | 22,500 7,000 | 681 213 |
| Matriculation Fee (Thai Students) | 10,000 | 303 |
| Enrollment Fees: | THB | US\$ |

Note:

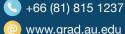
- 1. Tuition fee doesn't cover the followings:
 - Admission fee
 - Tuition fee for non-credit courses - Qualifying Exam and Dissertation Final Defense
 - AU Academic Writing Course (15,000 THB)
- The fees are subject to change at the university's discretion without prior notice.
- Currency exchange rate: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

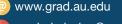
UNIVERSITY ADMISSIONS CENTER (UNIAD)













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