



GRADUATE  
STUDIES



VINCENT MARY  
SCHOOL OF  
ENGINEERING  
SCIENCE  
AND TECHNOLOGY

# Ph.D. CS

## DOCTOR OF PHILOSOPHY IN COMPUTER SCIENCE

**3-YEARS PROGRAM (for Master's degree holder) or  
4-YEARS 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 which will lead to the development of high quality computer scientists.

### QUALIFICATION FOR ADMISSION

Admission to the program is granted to applicants with:

#### 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

### APPLICATION REQUIREMENTS

1. A completed application form
2. Official transcript of the previous university attended both of Bachelor and Master (1 copy)
3. Bachelor's Degree Certificate (1 copy)
4. Master's Degree Certificate (1 copy)
5. Citizen identification card and house registration for Thai Applicants (1 copy)
6. Passport for Non-Thai applicants (1 copy)
7. One (1x1.5 inches) photograph (formal attire, not in graduation gown)
8. 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.*

Applicants who graduated from overseas Universities will be required to provide at the time of applying and not later, certified, attested, or notarized by competent notaries, all academic documents with the seal or stamp by the Ministry of Foreign Affairs, Ministry of Education or related department.

**ADMISSION FEE** 1,000 THB (Non-refundable)

### ENTRANCE EXAMINATION

- AU English Proficiency Test
- Interview Entrance Examination

### EXEMPTION

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

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

### 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, it requires 2 journal publications
- Have obtained library and financial clearance from the University
- Have demonstrated good behavior and discipline



VINCENT MARY SCHOOL OF  
ENGINEERING, SCIENCE AND  
TECHNOLOGY  
(SUARNABHUMI CAMPUS)

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ADMISSION SCHEDULE 2025

|   | Semester 1/2025<br>(June – October 2025) | Semester 2/2025<br>(November 2025 – March 2026) |
|---|--|---|
| Application deadline                      | From now – 27 May 2025                   | From now - October                              |
| AU English Proficiency Test and Interview | Online                                   | Online  |
| Entrance results                          | To be announced by the faculty           | To be announced by the faculty                  |
| Instruction begins                        | 2 June 2025                              | 3 November 2025                                 |

CURRICULUM STRUCTURE

TYPE 2.1 COURSEWORK AND DISSERTATION

|                        |            |
|------------------------|------------|
| (Master Degree Holder) |            |
| Foundation Courses     | Non-Credit |
| Elective Courses       | 12 Credits |
| Qualifying Examination | Non-Credit |
| Dissertation           | 36 Credits |
| Total                  | 48 Credits |

STUDY PLAN FOR TYPE 2.1\*

FIRST YEAR

FIRST SEMESTER

|          |                      |
|----------|----------------------|
| SC 6xxx/ | One Elective Course  |
| SC 8xxx  |                      |
| SC 8xxx  | One Elective Courses |

SECOND SEMESTER

|         |                        |
|---------|------------------------|
| SC 8xxx | Two Elective Courses   |
|         | 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.

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 6409     | Selected Topics in Quantum Computing              |
| 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 8350     | Computer and Data Security                        |
| SC 8354     | Advanced Computer Communications                  |
| SC 8380-599 | Advanced Topics in Computer Science               |

Dissertation

|         |                        |
|---------|------------------------|
|         | Qualifying Examination |
| SC 9000 | Dissertation           |

TYPE 2.2 COURSEWORK AND DISSERTATION

|                           |            |
|---------------------------|------------|
| (Bachelors Degree Holder) |            |
| Required Courses          | 9 Credits  |
| Elective Courses          | 15 Credits |
| Qualifying Examination    | Non-Credit |
| Dissertation              | 48 Credits |
| Total                     | 72 Credits |

STUDY PLAN FOR TYPE 2.2

FIRST YEAR

FIRST SEMESTER

|          |                            |
|----------|----------------------------|
| SC 6201  | Advanced Computing Systems |
| SC 6xxx/ |                            |
| SC 8xxx  | Two Elective Courses       |

SECOND SEMESTER

|         |   |
|---------|---|
| SC 6202 | Compuability, Complexity and Algorithms |
| SC 6212 | Programming Languages and Compiler      |
| SC 8xxx | One Elective Course                     |

SECOND YEAR

FIRST SEMESTER

|         |                        |
|---------|------------------------|
| SC 8xxx | Two Elective Courses   |
|         | Qualifying Examination |

SECOND SEMESTER

|         |                        |
|---------|------------------------|
| SC 9000 | Dissertation           |
|         | Prospectus Examination |

THIRD YEAR

FIRST SEMESTER

|         |              |
|---------|--------------|
| SC 9000 | Dissertation |
|---------|--------------|

SECOND SEMESTER

|         |              |
|---------|--------------|
| SC 9000 | Dissertation |
|---------|--------------|

FOURTH YEAR

FIRST SEMESTER

|         |              |
|---------|--------------|
| SC 9000 | Dissertation |
|---------|--------------|

SECOND SEMESTER

|         |                          |
|---------|--------------------------|
| SC 9000 | Dissertation             |
|         | Dissertation Examination |

ESTIMATED FEES 3 YEARS

| Installments                | Thai students<br>(THB) | Non-Thai students<br>(THB) | (US\$) |
|-----------------------------|------------------------|----------------------------|--------|
| 1 <sup>st</sup> Installment | 171,000                | 171,000                    | 5,700  |
| 2 <sup>nd</sup> Installment | 171,000                | 171,000                    | 5,700  |
| 3 <sup>rd</sup> Installment | 171,000                | 171,000                    | 5,700  |
| 4 <sup>th</sup> Installment | 171,000                | 171,000                    | 5,700  |
| 5 <sup>th</sup> Installment | 156,000                | 156,000                    | 5,200  |
| 6 <sup>th</sup> Installment | 140,000                | 140,000                    | 4,667  |
| Total                       | 980,000                | 980,000                    | 32,667 |

Note:

- The total fee above doesn't cover the followings:
  - Admission fee
  - Textbooks
  - Qualifying Examination
- The fees are subject to change at the university's discretion without prior notice.
- Currency exchange rate: US \$1 = THB 30

ESTIMATED FEES 4 YEARS (for Bachelor's degree holder)

| Installment                 | Thai Students | Non-Thai Students |
|-----------------------------|---------------|-------------------|
| Installment                 | Thai Students | Non-Thai Students |
| 1 <sup>st</sup> Installment | 171,000 THB   | 171,000 THB       |
| 2 <sup>nd</sup> Installment | 171,000 THB   | 171,000 THB       |
| 3 <sup>rd</sup> Installment | 171,000 THB   | 171,000 THB       |
| 4 <sup>th</sup> Installment | 133,500 THB   | 133,500 THB       |
| 5 <sup>th</sup> Installment | 133,500 THB   | 133,500 THB       |
| 6 <sup>th</sup> Installment | 133,500 THB   | 133,500 THB       |
| 7 <sup>th</sup> Installment | 133,400 THB   | 133,400 THB       |
| 8 <sup>th</sup> Installment | 133,100 THB   | 133,100 THB       |
| Total                       | 1,180,000 THB | 1,180,000 THB     |

Note:

- The total fee above doesn't cover the followings:
  - Admission fee
  - Textbooks
  - Qualifying Examination
- The fees are subject to change at the university's discretion without prior notice.
- Currency exchange rate: US \$1 = THB 30

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 March 2025

UNIVERSITY ADMISSIONS CENTER

ASSUMPTION UNIVERSITY

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Line



Facebook



Instagram



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