



PH.D. DOCTOR OF PHILOSOPHY IN INNOVATION ENGINEERING

**3-YEAR PROGRAM
COURSEWORK + DISSERTATION**

The Doctoral Program in Innovation Engineering is a modern engineering discipline that integrates mechanical engineering, electrical engineering, energy engineering, computer systems, intelligent robotic systems, information and communication technologies, and systems engineering to design innovative products and manufacturing processes. The program emphasizes

- The necessity of integrating and interacting among different branches of engineering.
- Innovative research, design, and development of products or systems to tackle real-world challenges.
- Challenging traditional engineering thinking and practices through team activities and crossing boundaries between conventional engineering disciplines.

Admission Requirements

- Candidates must hold a Master's degree in Engineering, Science, or a related field from an institution accredited by the Ministry of Education, Thailand. Candidates without the specified degree may be required to enroll in foundation courses, as determined by the program director and approved by the dean.
- Candidates must have a GPA of at least 3.0 on a 4.0 scale or at least one year of work experience in engineering or related fields.
- Candidates must complete the admission test and/or an interview specific to the program.

ENTRANCE 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 of application period. Otherwise, the application will not be considered and the applicant will not be allowed for the Admission interview.

Applicants who are graduates 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.

DURATION 3 years

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) 80 or an IELTS (Academic) score of at least 6.0 (Validation Two years)
- a Bachelor's degree from native English speaking countries (USA, Canada, UK, New Zealand and Australia)

GRADUATION REQUIREMENTS

Type 1.1 Dissertation

- Passed the qualifying examination.
- Passed dissertation proposal and final defense.
- Published the dissertation or part of it, or obtained acceptance of at least two publications in an international journal or academic publication with peer review, according to OHEC's Regulations on Criteria for Selection of Academic Journals for Publication of Academic Works (B.E. 2565).
- Have obtained library and financial clearance from the university.
- Have demonstrated good behavior and discipline.

Type 2.1 Coursework and Dissertation

- Have passed the qualifying examination.
- Have passed the dissertation proposal and final defense, evaluated by a committee appointed by the university. The final dissertation defense is open to the public.
- Have the dissertation/part of the dissertation published or have obtained an acceptance of one publication in an international journal or academic publication with peer review in accordance with OHEC's Regulations on Criteria for Selection of Academic Journals for Publication of Academic Works (B.E. 2565).
- Have obtained library and financial clearance from the university.
- Have demonstrated good behavior and discipline.

ADMISSIONS SCHEDULE 2025 / 2026

	Semester 1/2025 (June-October 2025)	Semester 2/2025 (November 2025 - March 2026)
Application Deadline	Fri. 25 May 2025	Wed. 25 October 2025
AU EPS Test and Interview	by appointment	by appointment
Registration Period	2 - 9 June 2025	27 Oct - 3 Nov. 2025
Instruction Begins	Mon. 9 June 2025	Mon. 3 November 2025

Number of Credits 48 Credits

Curriculum Structure

Type 1.1 Dissertation only

Dissertation	48 credits
Total	48 credits

First Year I First Semester

INE 9218 Dissertation

Second Semester

INE 9218 Dissertation

Second Year I First Semester

INE 9218 Dissertation

Second Semester

INE 9218 Dissertation

Third Year I First Semester

INE 9218 Dissertation

Second Semester

INE 9218 Dissertation

Type 2.1 Coursework and Dissertation

Required Courses	6 credits
Elective Courses	6 credits
Dissertation	36 credits
Total	48 credits

First Year I First Semester

INE 8211 Commercial Product Innovation, Engineering Management, and Entrepreneurships

INE 8212 Engineering Seminar and Research Method

Second Semester

Elective Course 1

Elective Course 2

Second Year I First Semester

INE 9219 Dissertation

Second Semester

INE 9219 Dissertation

Third Year I First Semester

INE 9219 Dissertation

Second Semester

INE 9219 Dissertation

Course Structure

1. Foundation Courses

INE 5111 Fundamentals in Engineering

2. Required Courses

INE 8211 Commercial Product Innovation, Engineering Management, and Entrepreneurships

INE 8212 Engineering Seminar and Research Method

3. Elective Courses

INE 8311 Advanced Engineering Analysis

INE 8312 Advanced Numerical Simulation using Finite Element Method

INE 8314 Advanced Thermal System Design

INE 8315 Advanced Digital Control Systems

INE 8316 Advanced Mechatronics and Robotics

INE 8411 Advanced Renewable Energy Engineering and Innovation

INE 8412 Advanced Smart Grid Innovation for Smart Energy

INE 8413 Advanced Energy Storage Engineering

INE 8414 Advanced Energy Conservation in Industry and Building

INE 8415 Advanced Automotive Power Electronic and Control System

INE 8416 Advanced Automotive Electrical Machines and Drives

INE 8511 Advanced Design and Analysis of Computer Algorithms

INE 8512 Advanced Digital System Architecture

INE 8513 Advanced Artificial Neural Networks

INE 8514 Advanced Digital Image Processing

INE 8515 Advanced Data Engineering and Intelligent Systems

INE 8516 Advanced Wireless Sensor Networks and Internet of Things

INE 8611 Advanced System Modelling, Analysis and Design

INE 8612 Advanced Computational Method, Optimization and Artificial Intelligence

INE 8613 Advanced Topics in Innovation Engineering 1

INE 8614 Advanced Topics in Innovation Engineering 2

INE 8615 Advanced Topics in Innovation Engineering 3

INE 8616 Advanced Topics in Innovation Engineering 4

4. Thesis

INE 9218 Dissertation

INE 9219 Dissertation

Estimated Fees

Installments	Thai and Non-Thai students (THB)	(US\$)*
1 st Installment	171,000	5,029
2 nd Installment	171,000	5,029
3 rd Installment	171,000	5,029
4 th Installment	171,000	5,029
5 th Installment	156,000	4,588
6 th Installment	140,000	4,118
Total	980,000	28,822

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.
- The exchange rate is contingent upon fluctuations in the foreign exchange market.



Vincent Mary School of Engineering, Science and Technology

www.vmes.au.edu

vmes@au.edu

Tel: +66 (0) 2783 - 2222 Ext 2312

Fb.com/Auvmes

Ig.com/Auvmes

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 April 2024

UNIVERSITY ADMISSIONS CENTER

ASSUMPTION UNIVERSITY

Hua Mak Campus, Assumption Building, Floor 1
Suvannabhumi Campus, SR101

Tel: +66 81 815 1237

Tel: +66 2 783 2345

Tel: +66 2 783 2222 ext. 4

Email: gradadmission@au.edu

WhatsApp: @abacgrad1

Line: @abacgrad

Facebook: abacgraduate

Instagram: au_grad_studies

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