

Inviting application for 2024/25 admission
Application deadline: 30 April 2024

Engineering Doctorate (EngD)

Engineering Doctorate is a 3-year full-time or 5-year part-time postgraduate programme co-hosted by the Departments in Biomedical Engineering, Computing, Electrical and Electronic Engineering, Industrial and Systems Engineering and Mechanical Engineering.

Programme Aims

This programme is targeted for those who are in or are aspiring to be in senior management or principal research and development positions in companies/organisations that are involved in science, technology and engineering. The curriculum is designed to improve the candidates' skills in management of innovation and technology, enhance professional competence and expertise in specific engineering fields and strengthen capabilities in research, innovation and technology transfer from a practical perspective.

Characteristics

The programme comprises two equally weighted components: coursework and thesis.

The coursework aims at reinforcing and expanding candidates' breadth of knowledge in management of innovation and advanced technologies. The thesis, which is company/organisation related, should make a significant contribution and/or provide innovative insights into professional practice in an engineering discipline.

The award of "Doctor of Engineering" will be granted on successful completion of all the coursework and the thesis.



Entrance Requirements

- A Master's degree in an engineering discipline, which is associated with the coverage of the hosting department (under exceptional circumstances, admission may be granted to holders of good Bachelor's degrees with Honours in a relevant engineering discipline).
- All applicants are expected to have substantial and relevant work experience. They should have sought permission to work on a company-related problem/project for the thesis. Alternatively, candidates can conduct a research/study that has been requested by the government, an industrial sector or a professional body/association.
- Applicants are also expected to demonstrate maturity, motivation, commitment and skill in communicating in English.
- Applicants who obtain a degree from a university of which the medium of instruction is not English are expected to provide one of the following proficiency test results (taken within 2 years) to fulfil the minimum English language requirement for admission purpose:
 - A score of 80 or above in the Test of English as a Foreign Language (TOEFL) Internet-based test;
 - An Overall Band score of 6.0 or above in the International English Language Testing System (IELTS) Academic module; or
 - Other equivalent qualifications to be considered by the Faculty.



Coursework

- Candidates are required to pass 5 Compulsory Subjects and 3 Elective Subjects, with a minimum Award GPA (AGPA) of 3.0, and complete a thesis.

Compulsory Subjects[^]

Five Compulsory Level 6 Subjects in block mode format (intensive course for a few days or over two weekends):

1. Research Methodology
2. Global Operations Strategy
3. Systems Transformation & Analysis
4. Performance Management Systems & Design
5. Economy, Energy & Environment: Strategies for Sustainable Development

Elective Subjects

Three Elective Subjects including overseas study trips* (i.e. Technological Innovation & Strategy; Strategic Lean Management) and a pool of guided study subjects / special topics related to the thesis.

[^] The subjects have been included in the list of reimbursable courses under the Continuing Education Fund. The mother course (Doctor of Engineering) of this module is recognised under the Qualifications Framework (QF Level [7]).

* Candidates have to bear flight cost, hotel accommodation fees, make extra travel insurance arrangement according to individual needs (especially for those who wish to advance or extend their stay in destination. Basic travel insurance will be provided by the University covering the designated period of the study trip), etc. if they select overseas study trips as their electives.

Recommended study pattern

Recommended study pattern for **Full-time** study

Year	No. of subjects to be completed	Semester One	Semester Two
1	5	<ul style="list-style-type: none"> • 2 Compulsory subjects • Thesis I * • Deadline to submit the Research Proposal by the end of this semester 	<ul style="list-style-type: none"> • 2 Compulsory subjects • Study Trip (Elective) <Recommended> • Thesis I (Con'd) • Submission of written report and conduct Thesis Proposal Confirmation by this semester • One-day Research Workshop
2	3	<ul style="list-style-type: none"> • 1 Compulsory subject • 1 Guided Study Subject (Elective) • Thesis II • One-day Research Workshop 	<ul style="list-style-type: none"> • Study Trip (Elective) <Recommended> • Thesis II (Con'd) • Submission of Annual Progress Report by the end of Thesis II • One-day Research Workshop
3	-	<ul style="list-style-type: none"> • Thesis III • One-day Research Workshop 	<ul style="list-style-type: none"> • Thesis III (Con'd) • Submission of Annual Progress Report by the end of Thesis III • Submission of the finalized thesis together with the 'Intention to submit thesis form' for arranging oral examination

* Full-time candidates will be registered for thesis at the start of their study in the first semester of the first year of study.

Recommended study pattern for **Part-time** study

Year	No. of subjects to be completed	Semester One	Semester Two
1	5	<ul style="list-style-type: none"> • 2 Compulsory subjects 	<ul style="list-style-type: none"> • 2 Compulsory subjects • Study Trip (Elective) <Recommended>
2	3	<ul style="list-style-type: none"> • 1 Compulsory subject • Deadline to submit the Research Proposal by the end of this semester 	<ul style="list-style-type: none"> • Study Trip (Elective) <Recommended> • 1 Guided Study Subject (Elective) • Thesis I ^ • One-day Research Workshop
3	-	<ul style="list-style-type: none"> • Thesis I (Con'd) • Submission of written report and conduct Thesis Proposal Confirmation by the end of first year of registration of Thesis • One-day Research Workshop 	<ul style="list-style-type: none"> • Thesis II • One-day Research Workshop
4	-	<ul style="list-style-type: none"> • Thesis II (Con'd) • Submission of Annual Progress Report by the end of this semester • One-day Research Workshop 	<ul style="list-style-type: none"> • Thesis III • One-day Research Workshop
5	-	<ul style="list-style-type: none"> • Thesis III (Con'd) • Submission of Annual Progress Report by the end of this semester • Submission of the finalized thesis together with the 'Intention to submit thesis form' for arranging oral examination 	-

^ Part-time candidates have full flexibility in determining their study patterns and pace. As long as the supervisor agrees that the candidates are ready and can begin the research, they may start registering thesis earlier than the recommended schedule of the second semester of the second year of study, and vice versa.

Tuition Fee

Full-time candidates will be charged HK\$93,600 per semester for 6 semesters (which is the normal duration for completing the programme on a full-time basis) whereas part-time candidates will be charged HK\$11,700 per credit for 48 credits. The total tuition fee of the 48-credit programme is HK\$561,600 for both full-time and part-time candidates. Full-time candidates having taken all the eight taught subjects earlier than the normal registration period (i.e. 6 semesters) will be required to pay the remaining fee when they submit their thesis for oral examination. The normal duration for the completion of thesis is consecutive six semesters.



Sharing by graduates



'One of the values of this EngD programme is to challenge my ability and capability. It was a great vehicle that I had successfully verified my patented technology under scientific analysis to prove the innovativeness of the concept. Through the EngD studying process, I had built a solid knowledge research platform so that I could creatively process my ideas with full confidence. The research result has allowed me to transform the concept into a new practical tool that it can be easily adopted by my business to tackle current field problems as well as benefit the industry as a whole.'

Dr Andrew Yan

*Executive Director
Wing King Tong Holding Ltd.
Graduate in 2016*

'My colleagues were surprised by my decision of taking up a further study after 30 years of graduation from my first degree. After a few semesters of hard work, I was able to explain to them and my customers with the latest engineering knowledge such as lean management, road-map, smart manufacturing, and optimization. They were impressed by my in-depth understanding of these engineering topics. My office is now posted with the certificates that I obtained from the reputable conferences and journals at which I had presented/published my research findings during my Engineering Doctorate (EngD) study. Complementary to my experience in the industry, the EngD program has helped me contribute to my work with a solid academic background.'

Dr Edward Law

*Operations Director
IMS Shenzhen, SANMINA
Graduate in 2019*



'This programme is a very special and unique offering. Although you will learn a tremendous amount of knowledge, of even greater value is how it changes the way you view the world. With lectures taught by leaders in the field from around the world, and immersive study trips abroad, you will gain insights that will help you realise that many problems are simply just new opportunities. This programme will evolve you. I cannot overstate how valuable and beneficial this experience has been, both for my career and personally in my daily life. I would highly recommend the programme to anyone who wants to take their skills to the next level.'

Dr MEMBREY Peter Loi

*Principal Software Engineer
Cheng Bao Ltd
Graduate in 2020*

「工程学博士学位课程让我看到了最前沿的科研动态和行业趋势，全面掌握了AI技术的研发与使用技能，提升自身创新思维和创造性。课程让我对产业的理解更深入一个层次，在几年的探索与研究中学到的知识，能够很好的应用到我的工作上去，既能充实自我，也能学以致用。」

李东威博士

*苏州工业园区领军创业投资有限公司 投资总监
2023年毕业生*



Enquiries and Application

Programme Coordinator: Professor Xiaowen Fu (tel: (852) 2766 6329; email: xiaowen.fu@polyu.edu.hk)

Deputy Programme Coordinator: Professor Jane You (tel: (852) 2766 7293; email: jane.you@polyu.edu.hk)

For further information on admission matters, please contact:

Programme Secretary: Ms Stephanie Wong (tel: (852) 3400 3813; email: stephanie.cm.wong@polyu.edu.hk)

More Programme Information:
<https://www.polyu.edu.hk/feng/engd>



Apply on-line:
www.polyu.edu.hk/admission

