

# CENTRE OF GRADUATE STUDIES

## PhD (ICT)

(R3/0611/8/0012) (7/31) (A9886) - ODL

### PROGRAMME OVERVIEW

The PhD program in Information and Communication Technology (ICT) by research is designed to cultivate advanced knowledge and skills in computing, networking, information systems, cybersecurity, artificial intelligence, computer science and software engineering. This program inculcates independent and impactful research in various ICT domains among students, providing innovative solutions to complex technological challenges. In addition, the research outcomes would contribute to academic scholarship through publications in peer-reviewed journals and conferences. The program prepares students for roles as researchers, educators, and industry leaders, contributing to advancing technology and society. Hence, graduates of PhD ICT will grab the opportunities in academia, research institutions, and industrial sectors.

### LEARNING OUTCOMES

- Integrate state-of-art knowledge through a systematic comprehension and in-depth understanding of the field of study.
- Develop original research work that broadens the boundary of knowledge through an in-depth thesis that has been presented and defended according to HEP standards.
- Develop innovative computing solutions that stand the tests of applicability, efficiency and effectiveness.
- Demonstrate effective interaction with peers, scholarly communities and society of diverse audiences through participation in discourses related to the field of study.
- Exhibit effective communication with peers, scholarly communities and society of diverse audiences by publishing and presenting technical materials in the fields of study.
- Utilise appropriate digital tools to acquire, interpret and extend knowledge in computing.
- Apply appropriate numerical techniques to acquire, interpret and extend knowledge in computing.
- Demonstrate leadership, teamwork, autonomy and responsibility in conducting research based on computing theoretical framework.
- Exhibit capabilities to extend relevant knowledge through life-long learning.
- Exhibit capabilities of having an entrepreneurial mindset related to the field of study.
- Uphold professional and ethical practices in conducting research and delivering solutions related to the field of study.

## RESEARCH AREAS

- Information System
- Machine Learning
- Decision Support System
- Computer Networking
- Computer Vision
- Knowledge Management
- Cybersecurity
- Human Computer Interaction
- Computer System
- Data Mining
- Software Engineering
- Natural Language Processing

## AUDIT COURSES

- Research Methodology
- Quantitative Data Analysis
- Qualitative Data Analysis

## PROGRAMME DELIVERY

Delivery Mode	Full-Time Study	Part-Time Study
Open & Distance Learning (ODL)	3 years 6 months	4 years 8 months

## ENTRY REQUIREMENTS

### MALAYSIAN

The minimum entry requirements are as follows:

- Possess a recognised Master's degree; OR
- Other equivalent recognised qualifications with a Master's degree

#### Additional Requirements:

- A statement of research intent, describing what you have already done and what you hope to accomplish in your doctoral research
- A curriculum vitae (CV) or resume

*Any of the above conditions would require student's research proposal to be approved.*

### INTERNATIONAL

The minimum entry requirements are as follows:

- Possess a recognised Master's degree; OR
- Other equivalent recognised qualifications with a Master's degree

## RESEARCH STAGE

### Stage 1

- Audit Courses
- Appointment of Supervisor
- Preparation of Research Proposal
- Proposal Defence

### Stage 2

- Data Collection

### Stage 3

- Thesis Writing

### Stage 4

- Thesis Submission
- Appointment of Examiners
- Thesis Evaluation by Examiners
- Thesis Examination/ Viva Voce

#### Additional Requirements:

- A statement of research intent, describing what you have already done and what you hope to accomplish in your doctoral research
- A curriculum vitae (CV) or resume

*Any of the above conditions would require student's research proposal to be approved.*

#### Minimum English Language Requirements for International Students:

- Minimum score of 6.0 for IELTS; OR
- Minimum score of TOEFL IBT 60; OR
- Minimum score of 4.0 for MUET; OR
- Other recognised equivalent test

*Those who have their tertiary education in English will normally be exempted from the above requirement.*

*Note: If a student does not meet this requirement, AeU will offer English proficiency courses to ensure that the student's proficiency is sufficient to meet the needs of the programme.*

*\*Terms and conditions apply.*