

## 1. Program

The Doctor Of Philosophy Computing In Computer Science & Information Technology

## 2. Brief introduction

The KICT awarded the Doctor of Philosophy in Computing, Computer Science and Information Technology. Students can choose to focus their studies on Computer Science Research or Information Technology Research for this degree.

The purpose of this programme is to produce a new generation of IT professionals that are well-rounded and capable of working in a wide range of IT specialisations. As a result, the field of study will become more diverse and interesting to Muslim students from all around the globe. Because of this, it is more likely that these students will go on to serve the ummah after they have finished school.

## 3. Program Outcome

- i. *Knowledge* – Demonstrate mastery advanced level of **theoretical and application in the field of Computing** and are able to apply the knowledge in tackling complex issues and solving problems.
- ii. *Practical Skills* – Use **relevant skills learnt in Computing** to perform complex tasks.
- iii. *Social Skills, Responsibilities and Islamicisation* – **Cooperate with others in multidisciplinary fields** and reintegrate revealed knowledge responsibly for the progress of the nation and the Ummah.
- iv. *Islamic Values, Attitudes and Professionalism* – Demonstrate commitment to Islamic ethics, autonomy and **professionalism in the workplace and multidisciplinary fields**.
- v. *Communication and Team Skills* – Communicate effectively with people from a diverse range of backgrounds by interpreting ideas to **provide critical responses on multidisciplinary issues raised**.
- vi. *Problem Solving and Scientific Skills* – **Analyse multidisciplinary issues** and demonstrate a higher order of skilfulness in planning, executing and evaluating strategies and action plans.
- vii. *Information Management and Lifelong Learning Skills* – Ability to use necessary **learning skills in computing**, apply effective strategies for lifelong self-improvement and conduct research independently.
- viii. *Managerial and Entrepreneurial Skills* – Apply managerial and entrepreneurial skills in **multi-disciplinary fields**.
- ix. *Leadership Skills* – Understand the different type of leadership styles and the demonstration of interpersonal skills when leading in a **group situation from multidisciplinary fields**.

## 4. Career Opportunities

Students who acquire their PhDs from KICT are anticipated to have received enough training and to be talented individuals who will contribute to the enhancement of human capital in subjects connected to computer science and information technology. This is an expectation that is placed on these students. They will be qualified to work as professional lecturers and researchers at academic institutions as well as industries that are related to education. They are the most likely candidates for managerial and administrative positions in industries and corporate bodies, as well as for database, network, and computer programming skills in the information technology industry and allied organisations. Additionally, they are the most likely candidates for positions in industries and corporate bodies (both internal and external). They will also be able to successfully carry out a diverse range of responsibilities for organisations. In addition, graduates have the opportunity to find work in a number of organisations

in both the public and commercial sectors, either in the capacity of officers of information technology or as consultants in the field of information technology

## **5. Program Structure**

The programme structure was set out so that during the first two semesters of students' studies, students who are enrolled in PhD programmes will be required to sit in on a total of two (2) different classes: Research Methodology and Islamic Worldview are the names of these classes, and the status of a student's enrollment is described as "Research Proposal." Once finishing the audit courses, the students will focus on working on their research proposal, and they will be required to demonstrate their progress at a "PG seminar" organised by the Kulliyyah. This seminar will be held after the students have completed all of the audit courses. Then, students will prepare their research proposal. The topic of the research proposal must be connected in some way to computers and other forms of information technology in order to be considered valid. After that, the students will be obliged to present and defend their research proposal plan as soon as it is finished and the supervisor or the supervisory committee has given the go-ahead to do so. This will take place as soon as possible after the proposal has been completed. If the student is successful in defending the proposal, they will continue with their research while their study status will be changed to "Thesis". The final version of the thesis will be reviewed by a panel that is made up of at least two (2) different examiners, at least one of whom needs to be an external examiner who comes from a university other than IIUM. Regarding the nomination of all examiners, the Kulliyyah Postgraduate Committee (KPGC) will make a recommendation to the Senate of the University, which will then be approved by the Senate. An oral examination of the thesis will be scheduled once the examiners have arrived at a decision that they all agree upon.

## **6. Areas of Research**

Students working toward a doctor of philosophy degree in computer science and information technology undergo training in all of the relevant subfields within the fields of computer science and information technology. This encompasses the following topics, but is not limited to them: information technology management, information systems planning and strategy, system development methodology, networks and telecommunications, databases, the internet and e-commerce, knowledge management, artificial intelligence, e-learning, information technology and Islam, and information technology in small businesses.

## **7. Duration of Study**

The minimum duration of study is two (2) years and graduation on time is set for three (3) years and a maximum of six (6) years for full-time enrolment. For part-time, the normal duration is five (5) years with a maximum of ten (10) years.