

## **1. Program**

The Master of Computing in Computer Science & Information Technology

## **2. Brief introduction**

The KICT is responsible for conferring the Master of Computing degree, with a concentration in either Computer Science or Information Technology Research Mode.

This master's programme has the goal of cultivating a new breed of professionals that are well-rounded and designed to enhance a wide variety of niches within computing and information technology, particularly from an Islamic point of view, in the development of ethical content and personality in addition to culture and knowledge. This will make the field of study more diverse and appealing to Muslim students from all over the world, increasing the likelihood that these individuals will go on to serve the ummah after they have completed their education.

## **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**

It is expected that students who earn their master's degrees from KICT will have received adequate training and will be talented individuals who will contribute to the enhancement of human capital in fields related to computer science and information technology. They will have the ability to work in academic institutions and related industries as skilled researchers and professional lecturers. 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 (both internal and external). They are capable of performing a wide variety of tasks within organisations. In addition, graduates may find work in a variety of public and private sector organisations, either as officers of information technology or as consultants in the field of information technology.

## **5. Program Structure**

Students who are enrolled in MCST programmes will be required to audit two (2) courses during their first semesters. These courses are Research Methodology and Islamic Worldview, and their status is listed as "Research Proposal." After finishing the audit courses, the students will concentrate on working on their research proposal and will be required to present their progress at a "PG seminar" organised by the Kulliyah. This seminar will be held after the students have completed the audit courses. It is required that the subject matter of the proposal be related to computing and information

technology in some way. During the course of the defence process, this will be investigated by the internal examiners. After that, as soon as the proposal is complete and has been given the go-ahead by the supervisor or the supervisory committee, the students will be required to present and defend their proposal. In the event that the student is successful in defending the proposal, they will proceed with their research while their study status is changed to "Thesis." At the conclusion of the allotted time for study, the thesis in its entirety must be handed in. The final thesis will be evaluated by a panel consisting of at least two (2) different examiners, one of whom is required to be an external examiner coming from a university other than IIUM. The Kulliyyah Postgraduate Committee (KPGC) will make a recommendation to the University's Senate regarding the appointment of all examiners, and the Senate will give its approval. After the examiners have reached a consensus, an oral examination of the thesis will be scheduled.

## **6. Areas of Research**

The Master of Computing in Computer Science and Information Technology Research Mode educates students in all of the pertinent areas of Computer Science and Information Technology. This includes, but is not limited to, the following topics: 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 duration of study is one (1) year with a maximum of three (3) years for full-time enrolment. The normal duration is two (2) years. For part-time, the normal duration is four (4) years with a maximum of five (5) years. The minimum duration for part-time is two (2) years.