# REGULATIONS FOR THE DEGREE OF MASTER OF SCIENCE IN INFORMATION TECHNOLOGY IN EDUCATION (MSc[ITE])

(See also General Regulations)

Any publication based on work approved for a higher degree should contain a reference to the effect that the work was submitted to the University of Hong Kong for the award of the degree.

#### **Ed216** Admission requirements

To be eligible for admission to the degree of Master of Science in Information Technology in Education, candidates shall

- (a) comply with the General Regulations;
- (b) hold
  - (i) a Bachelor's degree with honours of this University; or
  - (ii) another qualification of equivalent standard from this University or another university or comparable institution accepted for this purpose; and
- (c) satisfy the examiners in a qualifying examination, if required.

### **Ed217** Qualifying examination

- (a) A qualifying examination may be set to test the candidates' formal academic ability or their ability to follow the curriculum prescribed.
- (b) Candidates who are required to satisfy the examiners in a qualifying examination shall not be permitted to register until they have satisfied the examiners in the examination.

### Ed218 Length of curriculum

The curriculum shall extend over one academic year of full-time study, including a summer semester, or two consecutive academic years of part-time study. Candidates shall not be permitted to extend their studies beyond the maximum period of registration of two academic years of full-time study or four academic years of part-time study, unless otherwise permitted or required by the Board of the Faculty.

### **Ed219** Curriculum requirements

To complete the curriculum, candidates shall

- (a) follow instruction in the syllabuses prescribed and complete all specified work as required;
- (b) satisfy the examiners in all assessment tasks as may be required;
- (c) complete and present a satisfactory dissertation or project on an approved topic; and
- (d) satisfy the examiners in an oral examination, if required.

#### Ed220 Advanced standing

(a) Advanced standing may be granted to candidates who have successfully completed one or more modules in the Postgraduate Certificate in Advanced Educational Studies curriculum of this University or another qualification of equivalent standard accepted for this purpose.

- (b) Candidates may be granted advanced standing up to a maximum of three modules subject to the following conditions:
  - (i) the module(s) is appropriate for the specialist strand applied for; and
  - (ii) the application for advanced standing is received within five years of successful completion of the relevant modules or graduation from the Postgraduate Certificate in Advanced Educational Studies or another qualification of equivalent standard accepted for this purpose, whichever is later.
- (c) Application for advanced standing shall be made prior to the commencement of the curriculum, and should be accompanied by copies of academic transcripts to support the application.
- (d) Courses from institutions other than this University granted advanced standing shall not normally be considered in determining the award of mark of distinction but will be recorded on the transcript of the candidate.

#### **Ed221** Dissertation

- (a) Candidates who select the dissertation option shall
  - (i) submit the title of their dissertation for approval no later than six months before the formal submission of the dissertation; and
  - (ii) submit a statement that the dissertation represents their own work undertaken after registration as a candidate for the degree.
- (b) The examiners may also prescribe an oral examination on the dissertation.

### Ed222 Assessment and grades

- (a) Candidates shall be assessed by diverse forms of assessment as prescribed by the examiners during the course of their studies.
- (b) Candidates shall not be permitted to repeat a module for which they have received a D grade or above for the purpose of upgrading.
- (c) Modules in which candidates are given an F grade shall be recorded on the transcript of the candidate, together with the new grade if the candidate is re-assessed or repeats the failed module.

### Ed223 Re-assessment

- (a) Candidates who have failed to satisfy the examiners in any part of the assessment at the first attempt may be permitted to present themselves again for re-assessment of the failed module(s) as determined by the Board of Examiners.
- (b) Candidates who have failed to present a satisfactory dissertation at the first attempt may be permitted to re-present the dissertation for re-assessment within a period of not more than 12 months after it is deemed unsatisfactory.

#### **Ed224** Discontinuation

Unless otherwise permitted by the Board of the Faculty, candidates shall be recommended for discontinuation of their studies, if they have:

- (a) failed to satisfy the examiners upon re-assessment of a module, a project or a dissertation; or
- (b) exceeded the maximum period of registration specified in Regulation Ed218.

## Ed225 Award of degree

- (a) To be eligible for the award of the degree of Master of Science in Information Technology in Education, candidates shall
  - (i) comply with the General Regulations; and
  - (ii) complete the curriculum and satisfy the examiners in accordance with these regulations and the syllabuses.
- (b) Candidates who have shown exceptional merit may be awarded a mark of distinction, and this mark shall be recorded on the transcript of candidates. A list of candidates who have successfully completed all the degree requirements shall be posted on Faculty notice boards.

# SYLLABUSES FOR THE DEGREE OF MASTER OF SCIENCE IN INFORMATION TECHNOLOGY IN EDUCATION (MSc[ITE])

The degree of Master of Science in Information Technology in Education (MSc[ITE])) is a postgraduate degree awarded for the satisfactory completion of a prescribed programme in one of the following specialist strands:

- 1. E-leadership
- 2. E-learning
- 3. Learning technology design

Candidates are required to complete a total of 8 modules which comprise:

- 3 core modules
- 2 modules from a specialist strand plus either:
  - MITE6810. Dissertation (equivalent to 3 modules); or
  - MITE6322. Independent project (equivalent to 1 module) and 2 elective modules

The total curriculum load will be at least 300 hours, including self-study, conducting library and field research where appropriate, online work such as forum discussion, e-portfolio production, etc.

#### **CORE MODULES**

All candidates are required to complete 3 core modules.

### MITE6023 Information technology and educational leadership

This module provides students with the necessary knowledge and working methods to implement local IT policies and strategies at the institutional level. The module offers a comparative perspective for benchmarking local and international practices and identifies contemporary leadership issues concerning the implementation of information technology in education across multiple levels. Assessment: 100% coursework.

#### MITE6024 Teaching and learning with information technology

This module provides a comprehensive introduction to the use of information technology for teaching and learning. Topics range from traditional applications e.g., computer-based tutorials to more contemporary applications such as the use of learning objects, cognitive tools and collaborative technologies. The module highlights theories of learning underpinning technology integration and the educational contexts within which these are intended to be used.

Assessment: 100% coursework.

### MITE6025 Methods of research and enquiry

This module introduces students to research methods, emphasising critical appraisal and an understanding multiple approaches to conducting research. The module also examines the conceptualization, planning and conduct of small-scale research in the integration of information technology in educational settings.

Assessment: 100% coursework.

#### SPECIALIST MODULES

All candidates are required to complete two modules from the list of specialist modules for their chosen specialist strand:

### A. E-leadership

MITE6305 Digital culture and educational practice

MITE6310 Innovative practices in education through information technology adoption

MITE6328 Organisational learning

MITE6335 Technology in education in China within a global context

#### B. E-learning

MITE6311 E-learning strategies and management

MITE6330 Learning design and technology

MITE6333 Mobile and ubiquitous technology in education

#### C. Learning technology design

MITE6304 Designing shared virtual environments for learning

MITE6329 Multimedia in education

MITE6330 Learning design and technology

MITE6332 Learning objects

MITE6333 Mobile and ubiquitous technology in education

MITE6334 Digital video & storytelling in education

#### DISSERTATION AND PROJECT

All candidates are required to complete either MITE6810 Dissertation (equivalent to 3 modules) or MITE6322 Independent project (equivalent to 1 module).

### **MITE6810 Dissertation** (equivalent to 3 modules)

The dissertation of 15,000 to 18,000 words is an approved independent research/development project carried out under the supervision of one or more staff members. In all cases it should include an empirical element. The dissertation should provide a thorough and critical analysis of the topic undertaken by the student. Each candidate shall submit the title of the dissertation and present the completed dissertation by dates specified by the Board of Examiners. Candidates who opt to take the dissertation option are required to present their work at a dissertation seminar.

Assessment: 100% coursework.

# MITE6322 Independent project

The independent project of 4,000 to 5,000 words provides students with an opportunity to apply and extend their knowledge and skills developed through the programme and more specifically within their chosen area of specialism. The independent project enables students to extend what they have learnt to professional practices outside the University.

Assessment: 100% coursework.

#### **ELECTIVE MODULES**

Candidates, who take MITE6322. Independent project, are required to complete two elective modules, which have not yet been taken previously. Candidates may take relevant modules from other master degree curricula offered by the Faculty of Education under the advice and approval of the Programme Director. Not all elective modules will necessarily be offered every year.

#### MITE6304 Designing shared virtual environments for learning

This module provides an introduction to current leading-edge work on shared virtual environments for learning (SVEL) through a variety of reflective experiences in these environments. The module explores various theories underlying the pedagogy and content of SVEL as well as the implication and impact of web 2.0 technology on the design of virtual environments for learning. The module offers students opportunities to design and implement their own SVEL, based on sound pedagogic principles and to describe and illustrate appropriate strategies for their evaluation.

Assessment: 100% coursework.

#### MITE6305 Digital culture and educational practice

This module explores the impact of digital technologies on society, the community and the individual. It examines ways in which information technology has affected global and local communities and cultures, home, leisure, work and educational practices as well as our understandings of ourselves. Issues related to the evolution and impact of cyber-communities on adolescents and traditional educational communities will also be examined.

Assessment: 100% coursework.

### MITE6310 Innovative practices in education through information technology adoption

This module explores innovative practices in education through the integration of information technology. The module investigates in detail case studies collected from around the world to examine concepts and models of what constitutes innovative practice in a variety of educational settings. The module examines the proposition that technology can act as a lever for innovation and change in education.

Assessment: 100% coursework.

## MITE6311 e-Learning strategies and management

This module explores issues relevant to the design and delivery of e-learning in educational or corporate contexts. The module explores learning management systems and other virtual environments to support teaching and learning. The module also examines issues concerning e-learning infrastructure, delivery systems, content management, standards, proprietary versus open-source software, virtual worlds, and challenges to successful e-learning implementation.

Assessment: 100% coursework.

#### MITE6328 Organisational learning

This module explores the concept and processes of organisational learning. It examines the strategies and tools employed in creating and managing a learning organisation. Topics include managing chaos

and complexity, organisational culture and change management, scenario planning, training and learning (especially e-learning), unlearning, organisational memory, performance and evaluation of learning.

Assessment: 100% coursework.

#### MITE6329 Multimedia in education

This module examines methods for sourcing, selecting, using, adapting and evaluating educational multimedia. The module also explores processes and tools for designing and developing educational multimedia products.

Assessment: 100% coursework.

### MITE6330 Learning design and technology

This module examines instructional design models and systematic approaches to design of learning environments and resources. The module introduces instructional design from a theoretical perspective as well as providing students with an opportunity to examine the stages of learning product development. The module aims to create a bridge between traditional approaches to instructional design and more contemporary approaches that involve the use of interactive and collaborative learning environments and tools.

Assessment: 100% coursework.

### MITE6332 Learning objects

This module explores the design and development of learning objects (LO) to support teaching and learning. LOs are also examined as a strategy for effective management and delivery of institutional educational resources. The module explores different forms of LOs and examines processes of their design. Students will engage in practical activities, using software tools to develop LOs, and strategies for repurposing their use. The module addresses relevant theoretical issues including multimedia learning and cognitive processing of multimodal information.

Assessment: 100% coursework.

## MITE6333 Mobile and ubiquitous technology in education

This module provides a hands-on oriented and in-depth exploration of smart-phone/mobile devices in general, together with essential concepts and the impact of ubiquitous technologies for education and training. The potential for this technology in the next-generation learning systems to impact socio-technological and educational developments will be investigated through real-life examples. In addition to the theoretical and conceptual issues, students will develop practical knowledge in the design and development of simple educational applications for delivery via mobile technologies (e.g., iPhone, iPads and iPods). Particular attention will be given to object-oriented programming and integration with cloud computing.

Assessment: 100% coursework.

### MITE6334 Digital video and storytelling in education

The most important component of any e-learning curriculum is *content*. The integration of digital video and storytelling in education, perhaps more than any other medium, has the power to engage, captivate and enlighten today's learners. This course aims not only to enable the development of media literacy

and higher order thinking skills, but also to provide project-based learning experiences that have real world relevancy for contemporary educators. In this course, using the process Visualize – Analyze – Communicate – Apply, participants will explore the principles and application of effective digital video and storytelling in various pedagogical environments and identify and critically evaluate the pedagogical assumptions underlying various multimedia applications. Through the expression of creativity and multiple ways of thinking, participants in this course will engage and interact to develop the necessary skills and confidence to storyboard, plan, coordinate and produce digital video for education, as well as develop the technical capability to author *original storytelling content* using sound, graphics and video that will have significant implications for the learning experience of today's multimedia-savvy students.

Assessment: 100% coursework.

### MITE6335 Technology in education in China within a global context

Rapid developments in the field of Information Technologies (IT) pose significant challenges to contemporary education systems. Many countries are engaged in developing education policies and pedagogical practices to transform these developments into tangible benefits. The role of IT in China's educational system has been increasing over the last two decades. Policies leveraging these developments have been implemented at both national and provincial levels. However, role of IT in Chinese educational contexts may differ from that in the educational contexts of other countries. In embracing educational opportunities provided by IT China also faces unique and significant challenges.

The course will provide students with a framework for understanding and evaluating developments in IT with respect to educational policies and practices in a global context with an emphasis on China. Students will investigate the role of IT in educational systems in different countries. The course will focus on how policy issues surrounding the application of IT can and will transform educational systems in general and in China in particular. Students will develop comparatives perspectives to shed light on educational policies and practices in China with respect widening global contexts.

Assessment: 100% coursework.