

## **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.

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### **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.
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### **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.
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### **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.

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### **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.
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### **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.
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#### **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.
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#### **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.
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#### **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.
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#### **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.
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## **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

The MSc curriculum consists of a minimum of 360 hours of teaching and prescribed work. Other than the Dissertation and Project, each taught module entails at least 36 hours, including 24 contact hours. Candidates are required to complete a total of 10 modules which comprise:

- 3 core modules (each entailing at least 36 hours, including 24 contact hours)
  - either:
    - MITE6810. Dissertation (equivalent to 3 modules, entailing at least 108 hours, including 28 contact hours), 3 modules from a specialist strand and 1 elective module “Research seminars and workshops” (each entailing at least 36 hours, including 24 contact hours); or
    - MITE6322. Independent project (equivalent to 1 module, entailing at least 36 hours, including 3 contact hours), 3 modules from a specialist strand and 3 elective modules (each entailing at least 36 hours, including 24 contact hours)
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### **CORE MODULES**

All candidates are required to complete 3 core modules.

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#### **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.

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#### **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.

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#### **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.

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## **SPECIALIST MODULES**

Candidates are required to complete three 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  
MITE7345 Engaging adult learners in face-to-face and e-learning contexts  
MITE7346 Data, analytics and learning  
MITE7347 Project management

### **B. E-learning**

MITE6311 E-learning strategies and management  
MITE6330 Learning design and technology  
MITE6333 Mobile and ubiquitous technology in education  
MITE6336 Learning technology, e-learning pedagogy, and learning sciences  
MITE7341 Digital game-based learning  
MITE7345 Engaging adult learners in face-to-face and e-learning contexts  
MITE7346 Data, analytics and learning

### **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  
MITE7345 Engaging adult learners in face-to-face and e-learning contexts  
MITE7346 Data, analytics and learning

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## **DISSERTATION AND PROJECT**

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

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

The dissertation represents at least 108 hours of work (including 28 contact hours). 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.

Co-requisite: MITE6340. Research seminars and workshops

Assessment: 100% coursework.

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### **MITE6322 Independent project**

The project represents at least 36 hours of work (including 3 contact hours). 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.

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### **ELECTIVE MODULES**

Candidates opted for the project mode are required to complete three elective modules whereas candidates opted for the dissertation mode are required to complete one elective module “Research seminars and workshops” which have/has not yet been taken previously. Candidates may take relevant module(s) 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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **MITE6328 Organisational learning**

This module explores the concept and processes of organisational learning and the learning organisation. It examines the strategies and tools employed to create and manage a learning and innovative organisation. Topics include managing chaos and complexity; organisation culture and change, scenario planning, storytelling, professional development, training and learning (especially e-learning), performance and evaluation of learning, and others.

Assessment: 100% coursework.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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.

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### **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 comparative perspectives to shed light on educational policies and practices in China with respect to widening global contexts.  
Assessment: 100% coursework.

### **MITE6336 Learning technology, e-learning pedagogy, and learning sciences**

This module introduces practice-oriented, pedagogy-driven and theory-based framework for e-learning design and practice. The module will provide an introduction to various learning science theories to help students understand how people learn in various e-learning settings including the schools, the workplace, and our everyday world. We will explore the transformative interaction between pedagogical models, instructional strategies, learning theories, and e-learning design and practice. A case-based approach will be used in this module while multiple theories, pedagogies are accounted for the e-learning design and practice. The module is expected to help students better understand the theoretical and practical approaches to e-learning.

Assessment: 100% coursework.

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### **MITE6340 Research seminars and workshops**

This module focus on the development of specific research skills, including both qualitative and quantitative skills, and help students develop high quality research proposals for dissertations or independent projects. The topics of the workshop include not limited to introduction and basics of SPSS, basics of quantitative analysis, survey design, qualitative data analysis, and seminars on how to develop projects and dissertations.

Assessment: 100% coursework.

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### **MITE7341 Digital game-based learning**

This module aims to introduce the main idea behind Digital Game-Based Learning (DGBL). It will investigate the pedagogical aspects of using games for learning, including commercial games in education settings and games that are created specifically for educational purpose. This module will review current techniques and trends in educational games. Issues related to design, enhancement implementation and evaluation of DGBL will also be examined.

Assessment: 100% coursework.

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### **MITE7345 Engaging adult learners in face-to-face and e-learning contexts**

Adult learning takes place in a wide variety of settings and contexts, such as higher education, adult literacy, continuing professional training (CPT), or workplace education. This course explores issues related to the process of engaging an adult learner. This course will examine the perspectives, as well as the different theories which describe adult learning. This course is ideal for students who are currently or planning to work in an adult training capacity in an organization or educational institution, and would be responsible for designing, developing, or implementing training/educational-related programmes

Assessment will be by 100% coursework

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### **MITE7346 Data, analytics and learning**

Digital educational resource developers, educators, and researchers recognize the value of data in improving not only learning and teaching, but also the educational environments. Analyses of learner data can provide valuable insights into the learning process to help educators better understand and optimize the learning environments. This enables universities, schools, and training organizations to improve the quality of learning. The era of learner data and analytics in education is an emerging area of research interest. This course provides an introduction to analytics in learning and how it is being deployed in formal and informal learning contexts. Learners will explore the logic of analytics, the

basics of cleaning and using data, context analysis, predictive models and social networks analysis. We will discuss tools and analytics methods, such as linear regression and cluster analysis, as well as how to protect learner privacy and other rights. Assessment will be by 100% coursework

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### **MITE7347 Project management**

This module explores the project life cycle and Project Management (PM) techniques for managing and planning successful projects in organizations. Conceptual foundations from the PMBOK and their application are stressed, and applied using PM software. This course will run in project based, experiential learning mode (PBL) with participants completing a project ideally for an external client. Assessment will be by 100% coursework

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