Course Synopsis

Master of Education

EDUCATIONAL TECHNOLOGY

School of Education

Faculty of Social Sciences and Humanities

MASTER OF EDUCATION (EDUCATIONAL TECHNOLOGY)

BY TAUGHT COURSE

Students are required to complete a total of 45 Credit Hours according to the following courses:

Course	Course Codes and Names
University Elective (3 credits)	UH** **** University Elective (3 Credits)
Faculty Compulsory Courses (11 credits)	MHPU 1024 Research Methods in Education (4 Credits)
	MHPU 1044 Research Data Analysis (4 Credits)
	MHPU 1013 Innovations in Learning and Teaching (3 Credits)
Research Project (10 credits)	MHPT 1105 Research Study 1
	MHPT 1205 Research Study 2
Programme Core (9 credits)	MHPP 1113 Educational Technology Foundation and Research MHPP 1123 Technology and Media Design MHPP 1133 Authoring Language
Programme Electives (12 credits)	4 courses (minimum of 3 courses from student's programme – refer to list of elective courses by programme)
Total credits	45

COURSE SYNOPSIS

Educational Technology Curriculum		
Course Code	**Course Name**	**Synopsis**
University Elective		
UHPS 6033	Dynamic of Leadership	This course is intended to encourage students discover and develop their personal leadership qualities. Students will be exposed to leadership theories so that they could develop an insight that leadership itself is a dynamic relationship based on mutual influence and common purpose between leaders and followers. Topics covered include Introduction to Leadership, Leadership Traits & Ethics, Leadership Behaviour and Motivation, Influencing: Power, Politics, Networking and Negotiation, Contingency Leadership Theories, Communication, Coaching, and Conflict Skills, The Leader-Follower Relationship, Team Leadership, Leading Self-Managed Teams, Transformational and Level 5 Leadership. Students will be evaluated based on their class leadership role, short talk, and personal learning portfolios.
Faculty Compulsory Courses		
MHPU 1013	Innovation in Learning and Teaching	The course will enrich students' knowledge of the concepts and process of innovation in the field of education. Students will be able to apply the process of innovation in the educational setting through a Project Based Learning environment. At the end of the lesson, students will be able to develop an innovation product in teaching and learning which addresses the current needs of the students.
MHPU 1024	Research Methods in Education	This course discusses the process of conducting research in education which includes the perspectives of research activities. Among topics that will be covered are the scientific methods, basic elements of research from identifying the research problems to research approaches and designs, population and sampling, instrumentation, data collection, data processing and analysis and report writing
MHPU 1044	Research Data Analysis	Quantitative data analysis is the process of systematically applying statistical to describe, illustrate, and evaluate data. The quantitative data is determined by the specific quantitative approach taken (experimental research, survey) and in the form of statistical data. While data analysis in qualitative research can include statistical procedures such as analyse for patterns in observations through the entire data collection phase. The qualitative data is determined by the specific qualitative approach

		taken (field study, ethnography content analysis, oral history, biography) and in the form of interview transcripts, audio recording, video recording, documents, etc. An essential component of ensuring data integrity is the accurate and appropriate analysis of research findings. Therefore, this basic course in research data analysis aims to equip students with the knowledge and skills to analyse research data appropriately in solving problems involving quantitative and qualitative data.
Programme Core		
MHPP 1113	Educational Technology Foundation and Research	This course exposes students with fundamental concepts of Educational Technology, definition of Educational Technology (process & product), Information and Communication Technology (ICT), basic principles and models of instructional design (ID) and multimedia development, web technologies, computer-based information system management as well as mobile-based applications. Other aspects that will be discussed include human-computer interaction, interactive learning technology, Learning and Teaching delivery modes, and Innovative Teaching and Learning Strategies. This course also focuses on the State-of-the-art and up-to-date technologies including the emergence of the new media in Learning and Teaching. It also exposed students with research, development and publications related to ICT applications in the teaching and learning process, current research trends in Educational Technology, fundamental elements of conducting research and Educational Technology methodology. The implementation of this course is through blended learning approach with the integration of innovative pedagogies and alternative assessment methods for preparing future graduates for 4IR.
MHPP 1123	Technology and Media Design	The course introduces students to technology, and they will be given a broad grounding of digital media. Discussions revolve around the fundamentals of multimedia elements including text, graphics, audio, video and animation and their latest technology development. Students will also be exposed to design principles for all multimedia elements. In addition, this course will demonstrate the general process of multimedia development based on recent technology. This course also creates an environment for learners to innovate, create and collaborate by adopting technologies to enhance their learning process.
MHPP 1133	Authoring System	This course will expose students with basic programming and authoring concept. Aspects that will be discussed are introduction to programming, programming language, and authoring system. It will also discuss and expose students with programming and authoring skills of several languages. The students will be exposed

		to basic web programming skills and concepts using HTML and then move to complex concepts such as the integration of server-side scripting languages such as Active Server Pages (ASP) and PHP and also the use of databases such as Microsoft Access & MySQL. Through this course, students will be given opportunity to discover knowledge and skills to develop standalone multimedia applications, web-based applications (static and dynamic) and mobile applications.
Programme Electives		
MHPP 2213	Digital Learning Object	In this course, students will be exposed with latest development in digital learning object involving multimedia courseware and educational games. Students will engage with in-depth project-based learning approach with goal of solving educational related issues or problems as its centre of focus. Development using suitable software to create technological savvy and pedagogical supported software, reinforced with precise instructional design is among the learning process offered to students. In order to equip students with impactful field-related skill, they will be given opportunity to test their courseware as manoeuvre of bridging nowadays educational related problems and courseware development.
MHPP 2223	Mobile Learning Application Development	Mobile development refers to creating applications and any other kind of software development specific to mobile devices, including tablets and mobile phone. Mobile development seeks to optimize functionality and user experience on mobile devices, as there are significant differences between mobile and desktop User Experience (UX). In this course, students will be exposed to how mobile application can be used efficiently in teaching and learning. The course will also give students hands-on experience in developing interesting Mobile applications for teaching and learning using mobile application software and basic programming skills. Students will have an opportunity to evaluate the effectiveness of the developed mobile application using several testing and evaluation techniques.
MHPP 2233	System Development	The course provides students with the exposure of developing system for teaching and learning purposes. It also provides students with the opportunity to develop system using appropriate programming language and database application to perform specific teaching and learning operation. Evaluation of the effectiveness of developed system will be carried out before the system can be disseminated with prepared business/marketing plan. Students will have an opportunity to evaluate the effectiveness of the developed application.

MHPP 2243	Education Resource Management	The aim of this course is to give exposure to students on management of education resource centre. The course will cover the aspects of management issue, competencies of resource centre management, procedure and process of cataloguing and classification and other aspects of management activities such as budgeting, publicity, staff development and communication. At the end of this course students will be able to integrate knowledge and theory into practical ways of managing educational resources line with IR4.0 education.
MHPP 2253	Digital Imaging Technology	This course aims to equip students with knowledge and understanding of essential concepts, theories, and principles relevant to digital image production and imaging technologies. The course encourages exploration of image production with an emphasis on technical excellence in digital imaging and photography. The course also includes instruction in digital photography and other digital imaging equipment operation, varieties of photographing and lighting techniques, image editing techniques, digital workflow, and output for print and electronic presentation. Students will be expected to demonstrate an ability to use the tools and techniques competently in the production of their artwork.
MHPP 2263	Digital Video Production	This course addresses the theory and practices of digital video production. The primary goal of the course is to serve as a foundation for further exploration in digital video artwork and storytelling for educational as well as commercial purposes. Students will learn the technology, art and practices involved in effective visual storytelling. This course will cover the fundamentals of media analysis, video shooting, directing, editing, among other digital video production techniques. Students will form production teams and put those techniques into practices. Students will also be expected to learn the terminology of video production and cinematography and use this terminology competently. Students also will be guided through the pre-production process such as scripting and storyboarding as well as post-production to compiling their work into a final video product.
MHPP 2273	Animation and Visual Effects	This course introduces students with the field of animation production from both practical and theoretical perspectives. Based on IR4.0 and film industry 4.0, which is based on total digital modelling, will introduce new opportunities for students to work in the production of technology of digital synthesis of visual effects into an animation production. The student will learn concepts and techniques on how to integrate theoretical concepts with practical work to produce animation artefacts that are both technically and culturally sophisticated. Practical work focuses on script

		development, storyboarding, camera shooting techniques, audio integration, digital animation editing and a process of exporting animation formats. This course will also develop students' ability to work as animators in producing digital animation productions. Students will be introduced to the study of the whole process of 2D animation and visual effect production and encouraged to produce a quality animation. In addition to these conceptual and technical skills, this course provides students with an analytical framework in exploring the creative and cultural significance of digital animation and visual effects as a form of communication especially for teaching and learning purposes.
MHPP 2283	Innovative Learning Environment	This course provides exposure and experience to students on current trend of innovative learning environments (ILE) through the emerging of technologies in education aligned with Industrial Revolution 4.0. The goal of this course is to promote systematic design thinking that will cause a paradigm shift in the digital learning environments of today and tomorrow. Students will explore a variety of technology and pedagogical approaches in order to propose innovative use of educational space and infrastructure for teaching and learning. Topics covered include investigating emerging trends in digital learning environment, evaluating effective digital communications technologies and integration of such technologies into ILE, basic instructional design principles as applied to the design and facilitation of ILE, pedagogical approaches to facilitate learning in ILE, social processes, and presence, facilitating online discussions for cognitive engagement and managing assessment in ILE. Students also are given experience to develop the learning environment that integrates several technological tools and then evaluate its effectiveness.
MHPP 2293	Learning Interaction in New Media	This course will expose to students about the concept of learning interaction and interaction design processes. They will be able to design, develop and evaluate learning interaction in new media (such as social networking sites and learning management systems) by writing a learning interaction proposal in the course. Students will learn to evaluate learning interaction processes based on quantitative evaluation using social analysis tools. They will be able to analyse and interpret data to enhance teaching and learning delivery with technology.