SCHOOL OF PRE-U AND CONTINUING EDUCATION

Curtin University Malaysia

Curtin Micro-Credentials

What is Curtin Micro-Credential?

The Curtin Micro-Credential program is created for students, graduates and professionals who recognise that the global workplace is changing, and would like to upskill, cross-skill, and re-skill to adapt for changing market needs. We provide learners with a selection of courses in valuable and desirable learning areas. This program is open to all domestic and international participants.

Why Curtin Micro-Credentials?

If you intend to acquire on-demand knowledge and skills for personal or professional development, but do not plan to undertake formal learning and view formal learning as too expensive or time consuming, then Curtin Micro-Credentials give you access and choices to an array of courses which are highly sought after in the market place within a stackable credential ecosystem. The program offers you high quality and structured learning that fits into your busy personal and professional lives.

Course Pre-Requisite(s)

Minimum Diploma graduate from an accredited institution.

How does it work?

Participants will attend lectures and tutorials for their selected course with other Curtin students. Courses are conducted physically, and participants must follow the entire course with the following options:

(i) Submit and pass course assessments which lead to the award of credit. Each Curtin Micro-Credential carries 25 or 12.5 credits, allowing learners to stack credentials into a formal degree program or remain as a standalone credential. Upon successful completion and passing of course assessments, participants will be awarded a credential statement accompanied with a Certificate of Achievement to showcase their academic accomplishments.

(ii) Without assessment and no credit award. Participants may choose to do a course without attempting assessment. They will be given a certificate of Completion by Curtin Malaysia.

+6085 630100 **space.admin@curtin.edu.my** **CDT 250, 98009 Miri** **www.curtin.edu.my**

FACULTY OF BUSINESS

Micro-credentials listed in this section are from the following approved courses offered by the Faculty of Business:

- Bachelor of Commerce (Finance and Marketing) (**MQA/SWA0025**)
- Bachelor of Commerce (Human Resource Management and Management) (**MQA/SWA11145**)
- Master of Science (Project Management) (**MQA/SWA0040**)

Micro-Credential in Analytics for Decision Making

Unit Code: ECOM1000
Course Learning Outcomes

- Explain the role of data in business decision making across a range of business disciplines
- Explain legal and ethical issues related to using data in a business context
- Understand and interpret data from a range of relevant macroeconomic and other data sources including marketing, management, and finance, using appropriate business software
- Evaluate data from a range of business disciplines using a variety of analytic techniques to extract information for business decision making
- Create robust conclusion from data analytic results and effectively communicate finds to a diverse range of stakeholders

Micro-Credential in Culture and Ethics in Global Business

Unit Code: MGMT5003
Course Learning Outcomes

- Critically and reflectively review diverse sources of current cultural and ethical issues of significance in business contexts
- Develop global understanding and cross-cultural competencies for global managers
- Critically reflect on the impact of one's own cultural and ethical values and cultural heritage in interactions with others in organisation; with a focus on contemporary Indigenous stakeholder perspectives

Micro-Credential in Digital Marketing Strategy

Unit Code: MKTG3003
Course Learning Outcomes

- Understand the digital marketing context: internet-based business models, performance metrics and the role of strategic marketing planning
- Apply strategies of segmenting, targeting, and positioning into a digital marketing context
- Understand major digital marketing channels and strategies to engage consumers and assess their effectiveness
- Apply marketing mix elements (product, price, place, and promotion) to the online environment

Micro-Credential in Financial Decision Making

Unit Code: ACCT1002
Course Learning Outcomes

- Analyse the impact of global events on business strategies and financial decision making
- Review the financial market and capital structure and their impacts on business investment decisions using corporate governance principles
- Apply the concept of time value of money and capital investments to make responsible business financial decisions
- Apply management accounting concepts and techniques such as cost behavior and budgeting to business decision making
- Interpret financial statements, using accounting and finance concepts to make informed and ethical business decisions

Micro-Credential in Human Resources Management Introduction

Unit Code: MGMT2008
Course Learning Outcomes

- Explain the main functions of HRM in contemporary workplaces
- Critically analyse key HRM issues and their impact on the employment relationship nationally and internationally
- Apply relevant conceptual knowledge to solve practical problems in HRM
- Synthesise the key functions of HRM to form an integrated approach to HRM

Micro-Credential in International Marketing for Managers

Unit Code: MKTG5002
Course Learning Outcomes

- Assess international marketing environments and cross-cultural consumer behaviour
- Identify relevant opportunities and challenges in various international markets
- Formulate strategic solutions to address pertinent global marketing and sustainability issues
- Apply relevant theories and frameworks associated with international marketing

Micro-Credential in Managing Social Media Platforms

Unit Code: MKTG2006
Course Learning Outcomes

- Recognise current digital communications environment, global issues and future challenges for communicators
- Critique the use of diverse digital communication strategies in an industry context
- Critically reflect upon the ethical and legal ramifications of digital communication in an industry context
- Recommend digital strategies and tactics based on theoretical learning and digital literacy

Micro-Credential in Start-Up Business Planning

Unit Code: MGMT2001
Course Learning Outcomes

- Synthesise a broad array of information from multiple sources using various data collection methods to formulate a business plan and strategy to a client
- Examine the local and global external environmental context within which SMEs operate
- Evaluate and critically review the proposed business plans of others from a variety of perspectives
- Collaborate in teams that are designed for maximum diversity to deliver outcomes in a timely, effective and efficient manner
- Synthesise a broad array of information from multiples sources using various data collection methods to formulate a pitch presentation to potential investors

FACULTY OF HUMANITIES AND HEALTH SCIENCES

Micro-credentials listed in this section are from the following approved courses offered by the Faculty of Humanities and Health Sciences:

- Master of Science (Project Management) (**MQA/SWA0040**)

Micro-Credential in Project Cost Management

Unit Code: PRJM6001
Course Learning Outcomes

- Apply the processes of project cost management to create a project budget
- Create a cost-based model for cost-based decision making
- Recognise the concepts, theories, tools and techniques of project cost management

Micro-Credential in Project Management Overview

Unit Code: PRJM6000
Course Learning Outcomes

- Analyse authentic projects in organisations through the application of a project perspective
- Generate project documents for an authentic industry project
- Analyse and reflect upon a case study to contrast theory and practice of project initiation and planning
- Recognise concepts of projects and project management

Micro-Credential in Project Risk Management

Unit Code: PRJM6003
Course Learning Outcomes

- Create a risk management plan for an authentic project
- Apply quantitative risk analysis using specialist software to create a cost model, and evaluate and analyse the results
- Recognise the concepts of risk and project risk management
- Evaluate and reflect upon a personal risk experience through a risk management theoretical perspective

Micro-Credential in Project Time Management

Unit Code: PRJM6002
Course Learning Outcomes

- Create a project schedule through the analysis and application of principles and processes of time management, with the aid of specialist software, and reflect upon and analyse the results
- Synthesise conceptual and theoretical knowledge to solve a project time management problem
- Recognise the concepts, theories, tools and techniques of project time management for both capital projects and AGILE projects

FACULTY OF ENGINEERING & SCIENCE

Micro-credentials listed in this section are from the following approved courses offered by the Faculty of Engineering & Science:

- Bachelor of Engineering (Chemical Engineering) (Honours) (**MQA/FA5559**)
- Bachelor of Engineering (Environmental Engineering) (Honours) (**MQA/FA11791**)
- Bachelor of Engineering (Petroleum Engineering) (Honours) (**MQA/FA15629**)
- Master of Science (Sustainable Aquaculture) (**MQA/PSA14052**)

Micro-Credential in Advanced Reservoir Engineering

Unit Code: PEEN3008
Course Learning Outcomes

- Describe the concept of reservoir engineering for conventional and unconventional reservoirs
- Estimate hydrocarbon originally in place in the reservoir, using different methods such as, material balance, volumetric methods, and probabilistic method for different types of drive mechanisms
- Use production decline analysis models to perform production forecasting
- Use the Buckley and Leverett theory to evaluate water flooding performance
- Apply Enhanced Oil Recovery (EOR) methods to increase ultimate recovery in various types of reservoirs

Micro-Credential in Aquaculture Nutrition

Unit Code: AQUA5000
Course Learning Outcomes

- Explain basic metabolic processes and nutrient requirements in aquatic animals, utilization of food energy, and principles of formulating and processing of fish feed
- Conduct the feed digestibility assessment and grow out dietary experiments
- Apply methods of statistical analysis to compare quality of different diets
- Locate and retrieve relevant information using effective search strategies and professionally present this information in oral and written formats
- Describe and explain international feeding practices and ingredients

Micro-Credential in Environmental Monitoring and Analysis

Unit Code: ENST3006
Course Learning Outcomes

- Apply knowledge of contaminants, their modes of action, their persistence and their transports in ecosystems to evaluate the risks of pollution and effects of contaminants on ecosystems
- Apply basic procedures and techniques to monitor the environmental conditions and system functioning in terrestrial, aquatic and soil ecosystems following national standards
- Quantify and analyse solutions for environmental contamination and comment critically on the outcome
- Work on a design project within a team, and monitor and reflect on the project's progress and member's responsibilities

Micro-Credential in Fundamental Concepts of Cryptography

Unit Code: ISEC2000
Course Learning Outcomes

- Examine and apply information theoretic approaches (such as the one-time pads) with a focus on the limitations of these approaches
- Analyse fundamental number theory algorithms and theorems
- Assess computational hardness with a focus on one-way and trapdoor permutations
- Evaluate and design public and private encryption schemes
- Analyse and assess message authentication and digital signature approaches

Micro-Credential in Fundamentals of Reservoir Engineering

Unit Code: PEEN3001
Course Learning Outcomes

- Evaluate material balance and PVT issues to optimize field production
- Determine what reservoir information is useful for field description and how these relate to production and reserve estimates
- Use principles of flow knowledge of reservoir properties and software to allow correct field reservoir description to others
- Evaluate alternative ways of development to explain enhanced production optimization methods to others with regards to sociocultural and global issues

Micro-Credential in Geoenvironmental Engineering

Unit Code: ENEN4004
Course Learning Outcomes

- Describe and analyse the source and types of contaminants and their interaction with soil
- Assess the contaminant fate transport and transfer mechanism
- Evaluate site remediation technologies suitable for contaminants of concern
- Integrate design concept, governance, regulation, and sustainability involved in site remediation/brownfield regeneration projects via case studies

Micro-Credential in Introduction to Software Engineering

Unit Code: ISAD1000
Course Learning Outcomes

- Apply agile software project management tools and techniques
- Articulate functional and non-functional requirements
- Develop test designs and code using black-box and white-box methods
- Identify software design quality issues and propose solutions
- Understand the social impact of software and the importance of ethical and professional conduct

Micro-Credential in Numerical Reservoir Simulation

Unit Code: PEEN4004
Course Learning Outcomes

- Understand the concept of reservoir simulation, and explain fluid flow mechanism in petroleum reservoirs
- Examine what reservoir data can be used to best describe and simulate reservoirs
- Analyse production history data to optimize reservoir performance by numerical simulation
- Select and use appropriate reservoir simulation software to analyse reservoir production issues; and predict future performance

Micro-Credential in Engineering Economics, Management and Sustainability

Unit Code: CHEN4016
Course Learning Outcomes

- Analyse the structure of national and international engineering industries
- Analyse and evaluate the factors, and relationships between the factors, that contribute to effective management of an engineering plant
- Evaluate elements within industrial relations and people management, with respect to plant management
- Work effectively in a team to achieve common objectives
- Use systems thinking as a means of assisting the development of an organisation

Micro-Credential in Process Instrumentation and Control

Unit Code: CHEN3005
Course Learning Outcomes

- Model and explain the transient behavior of dynamic systems
- Apply the theory of automatic control to control systems
- Design and implement feedback control systems and demonstrate the concept of closed-loop stability
- Use measurement, instrumentation and control loop hardware for process variables such as temperature, pressure, flow, level and composition
- Use computer control software for data gathering and practical controller tuning

Micro-Credential in Process Plant Engineering

Unit Code: CHEN3000
Course Learning Outcomes

- Evaluate the mechanical design aspects associated with a chemical plant
- Evaluate the role of the mechanical engineer in plant design and operations, to allow effective communication and collaboration from a chemical engineering perspective

Micro-Credential in Mass and Energy Balances

Unit Code: CHEN2000
Course Learning Outcomes

- Understand the fundamental principles of mass and energy conservation (and associated unit systems) in the context of chemical processes
- Draw system boundaries and apply principles of mass and energy balance
- Learn basic principles of computer-aided process simulations
- Practice and explain strategies for effective team formation and communication

Micro-Credential in Process Simulation and Data Analysis

Unit Code: CHEN2004
Course Learning Outcomes

- Apply numerical methods to perform process engineering calculations and simulate chemical process flowsheets using a spreadsheet
- Simulate and analyse chemical process flowsheets using a commercial simulator
- Justify the decisions made in and evaluate the quality of process engineering computations
- Demonstrate effective written, graphical and interpersonal communication

Micro-Credential in Seafood Technology

Unit Code: FOOD6007
Course Learning Outcomes

- Examine seafood spoilage processes and associated with the microbiological study
- Explain the basis of technologies of seafood processing
- Apply the methods of quality control and quality management of seafood

Micro-Credential in Computational Transport Phenomena

Unit Code: CHEN3001
Course Learning Outcomes

- Examine the complexities of transport phenomena that occur in various natural and industrial scenarios
- Analyse and communicate the mechanisms of transport phenomena in isothermal and non-isothermal, laminar and turbulent flow systems
- Formulate mathematical equations based on continuity, momentum and energy balance equations to tackle problems encountered in nature and industrial scenarios
- Generate and integrate solutions based on the fundamental principles of transport phenomena
- Explain similarities and differences between the fluxes and equations of change for mass, momentum, and heat transport and deduce appropriate connections between them

Micro-Credential in Unix and C Programming

Unit Code: COMP1000
Course Learning Outcomes

- Implement algorithms in the C programming language
- Write and interpret standard C pointer expressions
- Implement C code which dynamically allocates/deallocates memory
- Employ standard Unix/C tools to diagnose problem faults
- Employ standard Unix/C tools to build software