MASTER OF SCIENCE (APPLIED MATHEMATICS)

A. UNIVERSITY

1. UTHM Vision

To be a global technical university in sustainable technology and transportation.

2. UTHM Mission

Provide technical solution for industry and community based on tauhidic paradigm.

3. UTHM Education Philosophy

UTHM education and training, founded on the tauhidic paradigm, strive to produce competent, professional and entrepreneurial graduates, driven by advanced technologies for global development.

B. PROGRAMME

1. Programme Educational Objectives (PEO)

The programme educational objectives for Master of Science (Applied Mathematics) programme (MWA) are to produce graduates who are able to:

PEO	Description	Key Performance Index (KPI)
PEO 1	Expert and competent in providing sustainable solutions to fulfill the needs of an organisation. [PLO 1, PLO 2, PLO 3, PLO 6, PLO 7]	at least 70% working in an organisation/ further in research
PEO 2	Continuously fostering good strategic thinking for the betterment of community, society and nation. [PLO 1, PLO 5, PLO 9, PLO 10, PLO 11]	at least 15% participated in research activity/ consultation needs.
PEO 3	Key members in the organisation with high consideration to the professionalism and ethics. [PLO 4, PLO 8, PLO 11]	at least 50% manage and monitor main project. at least 5% involve in professional bodies or obtained professional certificate

2. Programme Learning Outcomes (PLO)

The programme learning outcomes for Master of Science (Applied Mathematics) programme (MWA) are to produce graduates who are able to:

PLO 1	Knowledge and Understanding	Demonstrate expertise in the field of Applied mathematics [K].
PLO 2	Cognitive Skills	Generate scientific solutions to related problems in the field of Applied mathematics through creativity, critical thinking and systematic analytical skills [C].
PLO 3	Practical Skills	Perform specialized practical and technical skills in solving problem through various situations and related to Applied Mathematics [P].
PLO 4	Interpersonal Skills	Work effectively as a team to achieve specific objectives [IS].
PLO 5	Communication Skills	Deliver information, communicate effectively and link ideas in both written and verbal forms related to Applied mathematics [CS]. .
PLO 6	Digital Skills	Implement various digital technology applications in solving problems related to Applied mathematics and working activities [DS].
PLO 7	Numerical Skills	Produce and analyse data by applying numerical and visualisation skills to support decision making in various field of Applied mathematics [NS].
PLO 8	Leadership, Autonomy and Responsibility	Demonstrate good leadership characteristics and adapt responsibility throughout learning, working activities and collaboration among researchers and stakeholders [LAR].
PLO 9	Personal Skills	Engage in lifelong learning and information management to enhance knowledge and personal skills related to Applied mathematics [PS].
PLO 10	Entrepreneur	Adapt the entrepreneur interest, concepts and planning processes to undertake an entrepreneurial ideas [ES].
PLO 11	Ethics and Professionalism	Conduct research with minimum supervision subject to legislation, ethics and code of professional practice [EP].