

# MASTER OF SCIENCE

## A. UNIVERSITY

### 1. UTHM Vision

Towards a world class university in engineering, science and technology for sustainable development

### 2. UTHM Mission

UTHM is committed to generate and disseminate knowledge, to meet the needs of industry and community and nurturing creative and innovative human capital, based on tauhidic paradigm

### 3. UTHM Education Philosophy

The education and training in this university is a continuous effort to lead in the market oriented academic programmes. These programmes are student-focused and are conducted through experiential learning in order to produce well trained human resource and professionals who are catalysts for a sustainable development

## B. PROGRAMME

### 1. Programme Educational Objectives (PEO)

The programme educational objectives for Master of Science programme (KWZ) 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 (by research) programme (KWZ) are to produce graduates who are able to:

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