

Bachelor of Science Industrial Chemistry with Honours

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 Bachelor of Science Industrial Chemistry with Honors are to produce graduates who are able to:

| PEO | Description | Key Performance Index (KPI) |
|-------|--|--|
| PEO 1 | Competent and innovative in providing sustainable solutions to fulfill the needs of industry. [1, 2, 3, 6, 7] | <ul style="list-style-type: none">- 60% working in industries- 10% Membership professional body- 5% has received award- 10% participated in product development |
| PEO 2 | Continuously self-updating and contributing knowledge to the betterment of community, society and nation. [1, 5, 9, 10, 11] | <ul style="list-style-type: none">- 20% participated in conference / journal publication / research activity etc.- 5% has involved in community service- 5% has involved in entrepreneurial activity |
| PEO 3 | Key member in any organisation with high consideration to the environment and ethics. [PLO 4, 8, 11] | <ul style="list-style-type: none">- 20% managing or leading a project- 50% involve as team member in a project- 10% Membership professional body |

2. Programme Learning Outcomes (PLO)

The programme learning outcomes for Bachelor of Science Industrial Chemistry with Honors are to produce graduates who are able to:

| | | |
|---------------|---|--|
| PLO 1 | Knowledge and Understanding | Apply adequate knowledge and understanding in industrial chemistry. |
| PLO 2 | Cognitive Skills | Resolve any problems in industrial chemistry, analytically with creative and innovative solutions. |
| PLO 3 | Practical Skills | Apply a range of essential methods and procedures, using latest tools to solve a broad range of scientific problems in industrial chemistry. |
| PLO 4 | Interpersonal Skills | Work together effectively with different people in diverse learning and working communities in the field of study. |
| PLO 5 | Communication Skills | Deliver ideas both in written or oral forms using appropriate language in different situations. |
| PLO 6 | Digital Skills | Use a broad range of information and media technologies to support the learning process |
| PLO 7 | Numerical Skills | Incorporate numerical and graphical technique in industrial chemistry. |
| PLO 8 | Leadership, Autonomy and Responsibility | Demonstrate decision making professionally, autonomously and responsibly in managerial capacities. |
| PLO 9 | Personal Skills | Fit in with ease the self-development in professional pathways. |
| PLO 10 | Entrepreneur | Initiate a plan of self-driven entrepreneurship. |
| PLO 11 | Ethics and Professionalism | Identify ethical issues, make decision ethically, and act professionally within the varied social and professional environment. |