

# MASTER OF SCIENCE IN PROCESS PLANT OPERATION (MQA / PA 9578)

*Hands-On Master Programme*

## WHAT INDUSTRIAL EXPERTS SAY ABOUT OUR PROGRAMME



**Karl Kolmetz**  
Principal at KLM Technology

"This Master's Degree Programme was designed to fast forward your career with key skills identified by successful industry professionals, so that your career advances to the next level. Wisdom is the practical application of knowledge. This program will take the first principle of science and guide you to apply them in the real world"



**Idris Ibrahim**  
Chief Executive Officer,  
PETRONAS Technical Training Sdn.  
Bhd.  
(PTTSB)

"Supported by industry experienced instructors, the UMP MSc Process Plant Operation programme will expose learners to the entire value chain of the oil & gas industry. In addition, INSTEP state-of-the-art Upstream Downstream Training Plant accelerates learners' competency development through experiential learning to prepare competent workforce in plant Operations & Maintenance"



**Rajesh Xavier Santromsamy**  
Energy Manager -Sustainability/ Loss  
Elimination Program Leader  
FPG Oleochemicals Sdn. Bhd.

"This Master's programme will expose students to a comprehensive, practical & industry-based training. The current industry requires a competent, knowledgeable and hands-on technical person and this programme would be able to produce such competent technical person. The depth of the curriculum reflects the high expectation and standards required of the students, thus I strongly recommended this program to industry-practitioners who intend to upgrade their skills and career prospects."



**Mohd Rohizat Abdul Aziz**  
Regional Technical Manager,  
WR Grace Sdn. Bhd.

"The programme is diversifying but inclusive approach for a plant engineer. The program also focuses not only on GLC or domestic demand, but also on international and global demand"



### CONTACT US

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Faculty of Chemical and Process Engineering  
Technology

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### WEBSITE

Application: <http://ips.ump.edu.my/index.php/en/>  
Information of the course: <http://ftkkp.ump.edu.my/index.php/en/fiksa@ump.edu.my>

"I am interested to know more about the programme, my details are as follow"

Name :

Contact No. :

Email :

[www.ump.edu.my](http://www.ump.edu.my)

   UMPMalaysia

[www.facebook.com/ftkkp.ump.official/](http://www.facebook.com/ftkkp.ump.official/)  
Faculty of Chemical & Process Engineering Technology, UMP 

## KEY HIGHLIGHTS OF THIS MASTER PROGRAMME

- ▶ ONE year programme with three semesters (minimum)
- ▶ A "bridge to PhD" programme
- ▶ Courses are designed and delivered by senior academicians and industrial experts
- ▶ Flexible and various delivery modes including on-site activities, industrial case studies, industrial-based problem-based learning and etc.
- ▶ Weekends or evening classes are available for busy professionals at UMP Gambang Campus, INSTEP, and other potential locations\*.
- ▶ Hands-on experience in an upstream/downstream plant environment at INSTEP Upstream Downstream Training Plant

\*Gebeng industrial area (Pahang), Kerteh industrial area (Terengganu) or RAPID PETRONAS Pengerang (Johor) depending on the demand.

## INTAKES

- ▶ Intakes are open twice a year in February and September.

## PROGRAMME STRUCTURE

COURSES	CREDIT HOURS
CORE PROCESS & CHEMICAL ENGINEERING	24
ELECTIVE	6
DISSERTATION	10
<b>TOTAL</b>	<b>40</b>

## PROGRAMME STRUCTURE

SEMESTER	SUBJECT
I	Logistics and Operation Management
	Project Management
	Financial Analysis
	Research Methodology
II	Elective
	*Plant Integrity, Maintenance and Troubleshooting
	*Chemical Process Design and Equipment
	*Process and Production Control
III	*Process Safety Management
	Master Project 1
	Master Project 2
	Elective

\*Part of this subjects will be taught at INSTEP

## ELECTIVE SUBJECTS

ELECTIVE SUBJECTS
Energy Management
*Plant Utilities
Environmental Management and Sustainability Development
Strategic Marketing, Planning and Implementation
Quality Control and Assurance
Industrial Sustainability and Decision Making

\*Part of this subjects will be taught at INSTEP

## ABOUT FKKSA UMP

The Faculty of Chemical and Process Engineering Technology (FTKKP) of UMP was established to embark on research and development activities, particularly in the area of fine and specialty chemicals, chemical process scaling up, biotechnology and gas technology-related processes in order to generate the expertise relevant to the needs of the industry. In light of the establishment of the East Coast Economic Region (ECER), FTKKP is expected to be a reference centre for chemical and biotechnology-related activities. It will also serve as a catalyst for the development of these activities through programmes such as technology transfer, staff exchange, training, consultancy and other services related to chemical and natural resources engineering.

## PROGRAMME OBJECTIVE

This course aims to produce graduates who are not only competent in managing and operating process plant as well as applying latest and advanced technology, but at the same time showing organisation leadership, professionalism and responsibility towards society and environment.

## ENTRY REQUIREMENT

Candidates who would like to apply for this programme must meet the following conditions:

- ▶ A bachelor's degree with minimum CPA of 2.50 or equivalent, as accepted by the University Senate or
- ▶ A bachelor's degree or equivalent not meeting CPA of 2.50 can be accepted subject to a minimum of five (5) years working experience in the relevant fields.

## ENGLISH LANGUAGE REQUIREMENT

All international students must at least meet one of the following requirements:

- ▶ Students must have IELTS Band 5.0 or TOEFL 500. The certification should not be more than 2 years from the date test taken and registration of candidature. Exception – English requirement is not needed for international students with Bachelor and Masters' degrees from Malaysia universities.
- ▶ IELTS Band 5.0 and below and/or TOEFL 500 and below must attend Enhancement Module of the Pre-session English Course (PEC).
- ▶ Students without any English language certification must attend English course – Pre-session English Course (PEC).