

Faculty/School	<b>Faculty of Chemical and Energy Engineering</b>
Program Name	<b>Master in Chemical Engineering</b>
Program Code	<b>METK</b>
Mode of Program	<b>Taught course</b>
Academic Session/ Semester	<b>2024/2025-2</b>

## COURSE MENU

<b>University General Courses (Choose 1 ONLY)</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
UHMS6013	Seminar on Global Development, Economic and Social Issues	3
UHIS6013	Philosophy of Science and Civilization	3
UHPS6013	Dynamics of Leadership	3
UHMZ6023	Malaysia Society and Culture	3
UECS6023	Introduction to Technopreneurship	3
UHLM6013	Malay Language for Academic Writing	3
UBSS6023	Business Ethics, Responsibility and Sustainability	3
UBSS6013	Organizational Behavior and Development	3
UECS6013	IT Project Management	3
UMJJ6013	Basic Japanese Language & Culture	3
URTS6013	Environmental Ethics	3

<b>Pre-Requisite Courses (Compulsory for non-chemical Engineering Background)</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
METK0113	Mass Balance	3
METK0123	Chemical Reaction Engineering	3
METK0133	Separation Processes	3

<b>Core Faculty Courses (Compulsory)</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
METU1013	Research Methodology	3

<b>Core Courses (Compulsory)</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
METK1113	Advanced Chemical Reaction Engineering	3
METK1123	Computational Method in Chemical Engineering	3
METK1133	Separation Technology for Industrial Applications	3
METK1143	Project Management for Engineering and Technology	3

<b>Elective Courses (Choose 4 only)</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
METK1213	Advanced Thermodynamics	3
METK1223	Multiphase Reactor Analysis	3
METK1233	Data Science for Chemical Engineers	3
METB1103	Biotechnology for Engineers	3
METB1123	Facilities and Infrastructure in Bioprocess Engineering	3
METE1113	Sustainable Energy System & Management	3
METE1143	Thermal Energy Management and Audit	3
METE1233	Energy Integration and Resource Conservation	3
METE1253	Energy Planning for Conservation and Sustainable Development	3

METM1153	Hydrocarbon Gas Exploration, Production and Processing	3
METM1243	Liquefied Natural Gas Technology	3
METM1253	Membrane Technology for Gas Separation	3
METR1113	Polymer Characterization	3
METR1223	Smart Materials	3
METR1233	Surface and Foam Technology	3
METW1143	Occupational Safety	3

<b>Master Project</b>		
<b>Course Code</b>	<b>Course Name</b>	<b>Credit</b>
METK1314	Master Project 1	4
METK1326	Master Project 2	6

**Programme Coordinator : Dr. Nor Alafiza Yunus**  
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**PROGRAM STRUCTURE**

**COURSES OFFERED FOR NEW INTAKE STUDENTS SESSION 2024/2025 SEMESTER 2**

SYLLABUS	COURSE CODE	SEMESTER	SECTION	DAY & TIME	LECTURER'S NAME & CONTACT NO : (Email & HP no.)
University General Courses	<b>Student MUST refer to SPS Website <a href="https://sps.utm.my/academic-related-resources/">https://sps.utm.my/academic-related-resources/</a> for the University General Courses schedule</b>				
Core Faculty Course	METU1013	1	01	Wednesday 2.00 pm – 5.00 pm	Assoc. Prof. Dr. Zainul Akmar Zakaria <a href="mailto:zainulakmar@utm.my">zainulakmar@utm.my</a> 012-6270423
Core Courses	METK1123	1	01	Tuesday 8.00 am – 11.00 am	Dr. Nor Alafiza Yunus <a href="mailto:alafiza@utm.my">alafiza@utm.my</a> 012-3302842
	METK1233	1	01	Wednesday 8.00 am – 11.00 am	Dr. Nor Alafiza Yunus <a href="mailto:alafiza@utm.my">alafiza@utm.my</a> 012-3302842
	METK1143	1	01	Thursday 10.00 am – 1.00 pm	Dr. Norfairna Baharulrazi <a href="mailto:norfairna@utm.my">norfairna@utm.my</a> 013-7548950
Elective Courses	<i>Student can refer to other programs that offers elective courses (as listed in the study plan)</i>				
Project	-				