‘The Ability to Think, Analyze and Evaluate’

FACULTY OF ENGINEERING

BACHELOR OF ENGINEERING WITH HONOURS

BPKP CODE	PROGRAMMES CODE
HK08	**Mechanical Engineering**

For further inquiries, please contact :-

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Course Structure Session 2015 / 2016

HK08 Mechanical Engineering

	Year 1		Year 2		Year 3		Year 4	
	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
UNIVERSITY CORE (PROMOTION OF KNOWLEDGE) (8 CREDIT HOURS)	**UW00202** Islam and Asian Civilisation (2 credit hours)	**UW00102** Ethnic Relations **UCxxx02** (Please Choose 1 uc Course) (4 credit hours)	**UW00302** Fundamentals of Entrepreneurial Acculturation (2 credit hours)					
UNIVERSITY CORE LANGUAGE (8 CREDIT HOURS)	**UB00202** Oral Communication in English (For Student MUET Band 1 and 2) (2 credit hours)	**UB00102** Communicative English Grammar (For Student MUET Band 1 and 2) (2 credit hours)	**UB00702** English For Occupational Purposes (For Student MUET Band 1 and 2) (2 credit hours)	**UB00302** Reading And Writing In English (For Student MUET Band 1 and 2) (2 credit hours)				
	UB00602 Grammar In Context (For Student MUET Band 3,4,5 & 6) (2 credit hours)	**UB00402** Academic Reading and Writing (For Student MUET Band 3,4,5 & 6) (2 credit hours)	**UB02002** English For Employment (For Student MUET Band 3,4,5 & 6) (2 credit hours)	**UB00502** English For Research Purposes (For Student MUET Band 3,4,5 & 6) (2 credit hours)				
UNIVERSITY CORE CO-CURRICULUM (3 CREDIT HOURS)	**EXXXX3** Co-Curriculum (3 credit hours)							

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	Semester 1	Semester 2	Semester 3	Semester 4	Semester 5	Semester 6	Semester 7	Semester 8
PROGRAMME CORE (107 CREDIT HOURS)	**KM10303** Calculus I **KM10501** Engineering Workshop **KM10702** Engineering Drawings **KM10903** Statics (9 credit hours)	**KM10803** Engineering Programming **KM10403** Calculus II **KM10203** Engineering Materials **KM10603** Strength of Materials (12 credit hours)	**KM20303** Fluid Mechanics I **KM20503** Differential Equations **KM20701** Lab I **KM20903** Dynamics **KM21102** Engineering Thermodynamics (12 credit hours)	**KM21402** Electrical Technology **KM20203** Mechanics of Machines **KM20603** Numerical Methods **KM20801** Lab II **KM21003** Fluid Mechanics II **KM21202** CAD Engineering (14 credit hours)	**KM30303** Electrical Power and Machines **KM30502** Engineering Statistics **KM30903** Mechanical Design I **KM31101** Lab III **KM31303** Applied Thermodynamics **KM31503** Measurements and Instrumentation (15 credit hours)	**KM00505** Industrial Training **KM30403** Heat Transfer **KM30603** Mechanical Vibrations **KM31003** Mechanical Design II **KM31401** Lab IV **KM31603** Manufacturing Processes **KM31803** Control Engineering (21 credit hours)	**KM00303** Ethics and Law for Engineers **KM00102** Project I **KM41703** Electronics and Microprocessors **KM41903** Manufacturing System **KM40703** Finite Element Method (14 credit hours)	**KM00403** Management and Accounting for Engineers **KM00204** Project II **KM42602** Computer Aided Engineering **KM42801** Lab V (10 credit hours)
PROGRAMME CORE (ELECTIVE) (9 CREDIT HOURS)							**KM4xx03** Elective I (3 credit hours)	**KM4xx03** Elective II **KM4xx03** Elective III (6 credit hours)
TOTAL (135 CREDIT HOURS)	16	18	16	16	15	21	17	16

***Notes:**

: Language Requirements For Student MUET Band 1 and 2 & For Student MUET Band 3,4,5 & 6. Please Refer to PPIB Guidebook.

STUDENT CREDIT HOURS

: Core University (Upgrade Knowledge) + Core University (Language) + Core University (Co-Curriculum) + Core Program + Core Program (Elective)
: 8 Credit Hours + 8 Credit Hours + 3 Credit Hours + 107 Credit Hours + 9 Credit Hours
: 135 Credit Hours

OPTION 1 (MANUFACTURING)			OPTION 2 (ENERGY & MATERIALS)		
ELECTIVE I	**ELECTIVE II**	**ELECTIVE III**	**ELECTIVE I**	**ELECTIVE II**	**ELECTIVE III**
KM40103 Maintenance and Monitoring of Machines **KM42103** Industrial Automation	**KM40603** Finite Differential Methods **KM41403** Mechatronics **KM40803** Industrial Engineering **KM43003** Machining Processes **KM40403** Operational Research	**KM41603** Numerical Methods in Heat Engineering **KM41803** Aerodynamics **KM43603** Sensor and Vision System **KM43803** CAD/CAM	**KM41103** Tribology **KM42303** Acoustics **KM42503** Nuclear Technology	**KM43203** Composite Materials **KM41203** Advanced Strength of Materials **KM41003** Internal Combustion Engines **KM43403** Renewable Energy	**KM42003** Refrigeration and Air Conditioning **KM42203** Surface Engineering **KM44003** Failure Mechanisms