CURRICULUM DETAILS

BACHELOR OF ELECTRICAL AND ELECTRONIC ENGINEERING WITH HONOURS

ELECTRICAL ENGINEERING STUDIES

UNIVERSITI TEKNOLOGI MARA, PULAU PINANG

SEM	NO	COURSE	CODE	PRE REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
SEM 1	1	CO-CURRICULUM 1	HBU111	NONE	1	2	0	0	2
	2	CALCULUS FOR ENGINEERS	MAT435	NONE	3	3	1	0	4
	3	CIRCUIT THEORY	EEE411	NONE	3	3	1	0	4
	4	SIGNALS AND SYSTEMS	ESE411	NONE	3	3	1	0	4
	5	BASIC COMMUNICATION ENGINEERING	ECM413	NONE	3	3	1	0	4
	6	COMPUTER PROGRAMMING	ECE411	NONE	3	2	0	2	4
TOTAL					**16**	**16**	**4**	**2**	**22**
SEM 2	1	CO-CURRICULUM 2	HBU121	NONE	1	2	0	0	2
	2	FALSAFAH DAN ISU SEMASA	CTU552	NONE	2	2	0	0	2
	3	BASIC POWER ENGINEERING	EPO414	NONE	3	3	1	0	4
	4	BASIC INSTRUMENTATION AND CONTROL	ESE414	NONE	3	3	1	0	4
	5	ELECTRONICS	ELE414	NONE	3	3	1	0	4
	6	DIGITAL SYSTEMS 1	ECE414	NONE	3	3	1	0	4
	7	ELECTRICAL ENGINEERING LABORATORY 1	EEE415	NONE	1	0	0	3	3
TOTAL					**16**	**16**	**4**	**3**	**23**
SEM 3	1	CO-CURRICULUM 3	HBU131	NONE	1	2	0	0	2
	2	PENGHAYATAN ETIKA DAN PERADABAN II	CTU554	NONE	2	2	0	0	2
	3	ENGLISH FOR ORAL PRESENTATIONS	LCC400	NONE	2	2	0	0	2
	4	FURTHER CALCULUS FOR ENGINEERS	MAT455	MAT435	3	3	1	0	4
	5	ELECTRICAL POWER UTILISATION	EPO555	NONE	3	3	1	0	4
	6	MATERIAL AND SEMICONDUCTOR DEVICES	ELE511	NONE	3	3	1	0	4
	7	ELECTRONIC DRIVES AND APPLICATIONS	EPO556	NONE	3	3	1	0	4
TOTAL					**17**	**18**	**4**	**0**	**22**
SEM 4	1	ENGLISH FOR REPORT WRITING	LCC402	NONE	2	2	0	0	2
	2	INTRODUCTION TO NUMERICAL ANALYSIS	MAT575	NONE	3	3	1	0	4
	3	ELECTROMAGNETIC THEORY	ECM515	MAT455	3	3	1	0	4
	4	MICROPROCESSOR SYSTEMS	ECE515	ECE414	3	2	0	2	4
	5	POWER ELECTRONICS	EPO514	EEE411	3	3	1	0	4
	6	ELECTRONIC CIRCUIT ANALYSIS AND DESIGN	ELE557	ELE414	3	3	1	0	4
	7	ELECTRICAL ENGINEERING LABORATORY 2	EEE515	EEE415	1	0	0	3	3
TOTAL					**18**	**16**	**4**	**5**	**25**
SEM 5	1	STATISTICS FOR SCIENCES AND ENGINEERING	STA408	NONE	3	3	1	0	4
	2	ELECTRICAL MACHINES AND DRIVES	EPO554	EPO414	3	3	1	0	4
	3	CONTROL SYSTEMS	ESE551	ESE414	3	3	1	0	4
	4	DIGITAL DESIGN AND COMPUTER ARCHITECTURE	ELE558	ECE414	3	3	1	0	4
	5	COMMUNICATION SYSTEMS ENGINEERING	ECM551	ECM413	3	3	1	0	4
	6	ELECTRICAL ENGINEERING LABORATORY 3	EEE525	EEE515	1	0	0	3	3
TOTAL					**16**	**15**	**5**	**3**	**23**
SEM 6	1	THIRD LANGUAGE (LEVEL 1)	TAC401	NONE	2	2	0	0	2
	2	DIGITAL SIGNAL PROCESSING	ESE553	ESE411	3	3	1	0	4
	3	POWER SYSTEM ANALYSIS	EPO552	EPO414	3	3	1	0	4
	4	ELECTIVE 1			3	3	0	1	4
	5	ELECTIVE MULTIDISCIPLINE			3	3	1	0	4
	6	ELECTRICAL ENGINEERING LABORATORY 4	EEE535	EEE525	1	0	0	3	3
Jumlah					**15**	**14**	**3**	**4**	**21**
SEM 7	1	THIRD LANGUAGE (LEVEL 2)	TAC451	TAC401	2	2	0	0	2
	2	INTEGRATED SYSTEM DESIGN	EEE611	NONE	3	1	0	4	5
	3	HIGH VOLTAGE ENGINEERING	EPO616	NONE	3	3	1	0	4
	4	ELECTIVE 2			3	3	0	1	4
	5	ELECTIVE 3			3	3	1	0	4
	6	FINAL YEAR PROJECT 1	EEE600	NONE	2	0	0	4	4
	7	INDUSTRIAL TRAINING	EEE655	NONE	4	0	0	0	0
TOTAL					**20**	**12**	**2**	**9**	**23**
	1	TECHNOLOGY ENTREPRENEURSHIP	ENT600	NONE	3	3	1	0	4
	2	THIRD LANGUAGE (LEVEL 3)	TAC501	TAC451	2	2	0	0	2
	3	ELECTRICAL ENGINEER IN SOCIETY	EEE653	NONE	3	3	1	0	4
	4	SELECTED INDUSTRIAL TOPICS	EEE652	NONE	2	2	0	0	2
	5	ELECTIVE 4			3	3	0	1	4
	6	FINAL YEAR PROJECT 2	EEE650	EEE600	4	0	0	8	8
TOTAL					**17**	**13**	**2**	**9**	**24**
GRAND TOTAL					**135**	**120**	**28**	**35**	**183**

ELECTIVE COURSES

ELECTIVE MULTIDISCIPLINE

SEM	FIELD	COURSE	CODE	PRE REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
SEM 6	HOTEL & TOURISM	ORGANISATIONAL BEHAVIOUR FOR THE HOSPITALITY AND FOOD SERVICE INDUSTRY	HTC630	NONE	3	3	0	0	3
	HOTEL & TOURISM	HOSPITALITY HUMAN RESOURCE MANAGEMENT	HTH666	NONE	3	3	0	0	3
	HOTEL & TOURISM	INFORMATION TECHNOLOGY MANAGEMENT FOR HOSPITALITY BUSINESS	HTH669	NONE	3	3	0	0	3
	BUSINESS & MANAGEMENT	PRINCIPLES AND PRACTICE OF MANAGEMENT	MGT420	NONE	3	3	0	0	3

ELECTIVE 1

SEM	FIELD	COURSE	CODE	PRE REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
SEM 6	POWER	ELECTRICAL CONVERSION AND ELECTRICAL TRANSPORTATION SYSTEM	EPO623	EPO514	3	3	0	1	4
	ELECTRONIC	INTEGRATED CIRCUIT DESIGN	ELE556	ELE511	3	3	0	1	4
	SYSTEM	INDUSTRIAL INSTRUMENTATION	ESE554	ESE414	3	3	0	1	4
	COMPUTER	EMBEDDED SYSTEMS	ECE553	NONE	3	3	0	1	4
	COMMUNICATION	ANTENNA DESIGN AND ANALYSIS	ECM642	NONE	3	3	0	1	4
	BIOMEDICAL	BIOMEDICAL MODELING AND SIMULATION	EBM552	NONE	3	3	0	1	4

ELECTIVE 2 & 3

SEM	FIELD	COURSE	CODE	PRE REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
SEM 7	POWER	ARTIFICIAL INTELLIGENCE IN POWER QUALITY	EPO624	NONE	3	3	0	1	4
	POWER	POWER SYSTEM OPERATION AND CONTROL	EPO553	EPO414	3	3	1	0	4
	ELECTRONIC	VLSI SYSTEM DESIGN	ELE614	ELE556	3	3	0	1	4
	ELECTRONIC	SEMICONDUCTOR FABRICATION TECHNOLOGY	ELE615	ELE511	3	3	1	0	4
	SYSTEM	INDUSTRIAL AUTOMATION AND ROBOTICS	ESE616	NONE	3	3	0	1	4
	SYSTEM	PROCESS CONTROL	ESE611	ESE551	3	3	1	0	4
	COMPUTER	DIGITAL IMAGE PROCESSING	ECE645	NONE	3	3	0	1	4
	COMPUTER	DATA COMMUNICATION AND COMPUTER NETWORK	ECE644	NONE	3	3	1	0	4
	COMMUNICATION	MOBILE RADIO COMMUNICATIONS	ECM643	NONE	3	3	0	1	4
	COMMUNICATION	DIGITAL COMMUNICATION SYSTEM	ECM552	NONE	3	3	1	0	4
	BIOMEDICAL	REHABILITATION ENGINEERING	EBM613	NONE	3	3	0	1	4
	BIOMEDICAL	MEDICAL INSTRUMENTATION	EBM612	NONE	3	3	1	0	4

ELECTIVE 4

SEM	FIELD	COURSE	CODE	PRE REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
SEM 8	POWER	ELECTRICAL EFFICIENCY AND DEMAND RESPONSE	EPO627	NONE	3	3	0	1	4
	POWER	CLEAN ENERGY AND DECARBONIZATION	EPO636	NONE	3	3	0	1	4
	ELECTRONIC	ANALOGUE CMOS INTEGRATED CIRCUITS	ELE648	ELE556	3	3	0	1	4
	ELECTRONIC	NANOTECHNOLOGY	ELE613	NONE	3	3	0	1	4
	SYSTEM	MODERN CONTROL SYSTEM AND DESIGN	ESE613	ESE551	3	3	0	1	4
	SYSTEM	INTELLIGENT CONTROL SYSTEMS	ESE614	ESE551	3	3	0	1	4
	COMPUTER	MOBILE AND SENSOR COMPUTING	ECE640	NONE	3	3	0	1	4
	COMPUTER	COMPUTATIONAL INTELLIGENCE	ECE646	NONE	3	3	0	1	4
	COMMUNICATION	SATELLITE COMMUNICATION SYSTEMS	ECM644	NONE	3	3	0	1	4
	COMMUNICATION	RADIO FREQUENCY DESIGN	ECM645	NONE	3	3	0	1	4
	BIOMEDICAL	STATISTICS IN BIOMEDICAL ENGINEERING	EBM615	NONE	3	3	0	1	4
	BIOMEDICAL	MEDICAL IMAGING	EBM611	NONE	3	3	0	1	4