

STUDY SCHEME 2016-2020					
BACHELOR OF ELECTRIC AND ELECTRONIC ENGINEERING					
Department of Electric and Electronic					
Faculty of Engineering, Universiti Putra Malaysia					
FIRST SEMESTER			SECOND SEMESTER		
CODE	COURSE	CREDIT	CODE	COURSE	CREDIT
YEAR 1					
ECC3001	Engineering Mathematics I	3(3+0)	ECC3002	Engineering Mathematics II	3(3+0)
EEE3101	Electrical and Electronic Principles	3(3+0)	EEE3102	Semiconductor Devices	3(3+0)
EEE3103	Computer Programming	4(3+1)	EEE3105	Digital Circuits	3(3+0)
SKP2204	Ethnic Relations	2(2+0)	EEE3106	Electric Circuits	3(3+0)
PRT2008	Agriculture and Man	2(2+0)	EEE3902	Electrical and Electronics Laboratory I	1(0+1)
QKXXX	Credited Co-curriculum	1(0+1)	BBI2423	Academic Interaction and	3(2+1)
			QKXXX	Credited Co-curriculum	1(0+1)
TOTAL		15	TOTAL		17
YEAR 2					
EEE3110	Basic Electromagnetism	3(3+0)	EEE3104	Instrumentations and Measurements	3(3+0)
EEE3107	Analog Systems	4(3+1)	EEE3111	Advanced Electromagnetism	3(3+0)
EEE3108	Digital System	4(3+1)	EEE3201	Microprocessor Technology	4(3+1)
BBI2424	Academic Writing	3(2+1)	EEE3401	Control Systems	3(3+0)
SKP2101	Malaysian Nationhood	3(3+0)	SKP2203	Islamic Civilisation and Asian Civilisation	2(2+0)
TOTAL		17	TOTAL		15
YEAR 3					
EEE3202	Microelectronic Principles	3(3+0)	EEE3304	Power System Analysis	3(3+0)
EEE3302	Power Electronics	3(3+0)	EEE3502	Communication Engineering	4(3+1)
EEE3313	Electrical Machines and Drives	3(3+0)	EEE390X	Elective Laboratory ²	1(0+1)
EEE3402	Industrial Control Electronics	3(3+0)	ECC3202	Computer Architecture	3(3+0)
EEE3501	Signal Processing	3(3+0)	ECC3004	Engineering Statistics	3(3+0)
EEE3904	Electrical Power Engineering Laboratory	1(0+1)	ECC3402	Multimedia Systems	3(2+1)
EEE3905	Control Engineering	1(0+1)			
TOTAL		17	TOTAL		17
YEAR 4					
EEE4901	Industrial Training ¹	5(0+5)	ECV3001	Engineers and Society	3(2+1)
EEE4949A	Bachelor's Project	2(0+2)	EEE4949B	Bachelor's Project	4(0+4)
EEE4910	Electrical and Electronic Systems Design Project	3(0+3)	EEEXXXX	Elective II ²	3(3+0)
EEE4307	Electrical Power Generation and Utilisation	3(3+0)	EEEXXXX	Elective III ²	3(3+0)
EEEXXX	Elective I ²	3(3+0)			
TOTAL		16	TOTAL		13
TOTAL CREDITS					127

NOTE :

¹ EEE4901 Industrial Training are conducted for 10 weeks during the semester break in second semester of third year of studies.

² Elective courses EEEXXXX and elective laboratories EEE390X must be enrolled in the same option.

Students are compulsory to enrol one (1) from three (3) offered options. For one (1) chosen option, students need to enrol one (1) elective laboratory course in Year 3 and another three (3) elective courses in final year.

ELECTIVE LABORATORY COURSES					
FIRST SEMESTER			SECOND SEMESTER		
CODE	COURSE	CREDIT	CODE	COURSE	CREDIT
			EEE3906	Microelectronic Laboratory	1(0+1)
			EEE3907	Power System and Machine Laboratory	1(0+1)
			EEE3908	Control Engineering Laboratory II	1(0+1)

Proposed selection of courses are as follows:

CODE	COURSE	CREDIT
MICROELEKTRONIC ENGINEERING OPTION		
ECC4504	Radio Frequency and Microwave	3(3+0)
EEE4203	VLSI Systems Design	3(3+0)
EEE4204	Integrated Circuit Fabrication Technology	3(3+0)
EEE4205	Microsystem and Sensor	3(3+0)
EEE4206	Analog Integrated Circuit Design	3(3+0)
EEE4207	Testing and Reliability Engineering	3(3+0)
EEE4208	Advanced Semiconductor Devices	3(3+0)
POWER ENGINEERING OPTION		
EEE4305	Power System Protection	3(3+0)
EEE4306	Electrical Wiring Design	3(3+0)
EEE4308	Industrial Drives	3(3+0)
EEE4309	Power System Operation and Control	3(3+0)
EEE4310	High Voltage Engineering	3(3+0)
EEE4311	Electric Power Quality	3(3+0)
CONTROL ENGINEERING OPTION		
ECC4304	Autonomous Robots	3(3+0)
EEE4403	Control System Design	3(3+0)
EEE4404	Intelligent Control System	3(3+0)
EEE4405	Embedded Control System	3(3+0)
EEE4406	Industrial Process Control	3(3+0)
EEE4407	Multivariable Control Systems	3(3+0)

Nota:

- ¹ Credited Cocurriculum may be taken at any semester during the duration of study
- ² For Elective Laboratory course, choose one (1) from three (3) Elective Laboratory.
- ³ Industrial Training is carried out at least for 10 weeks after the sixth (6) semester during inter semester break.
- ⁴ For Elective Technical Course, choose three (3) courses

