

FACULTY OF ENGINEERING, MULTIMEDIA UNIVERSITY (CYBERJAYA CAMPUS) - COURSE STRUCTURE

BACHELOR OF ENGINEERING (HONS) ELECTRONICS MAJORING IN NANOTECHNOLOGY

March 2019/2020 Intake Onwards

CODE	SUBJECT	β YEAR			γ YEAR			δ YEAR			ε YEAR			Pre-requisite
		T3	T1	T2	T3	T1	T2	T3	T1	T2	T3	T1	T2	
	Core:													
EMT1016	Engineering Mathematics I		3											-
EEL1166	Circuit Theory		3											-
EEE1016	Electronics I		3											-
ECE1016	Computer and Program Design		3											-
EEL1176	Field Theory		3											-
EEE1026	Electronics II			3										EEE1016
EEE1036	Digital Logic Design		3											-
EMT1026	Engineering Mathematics II			3										EMT1016
EEE1046	Electronics III				3									EEE1016
ECE1026	Algorithms and Data Structures			3										ECE1016
EEL1206	Introduction to Machines and Power Systems			3										EEL1166
EEL1196	Instrumentation & Measurement Techniques			3										EEL1166
ECE2056	Data Communications and Networking				3									EEE1036
EMT2036	Engineering Mathematics III					3								EMT1026
ECE2216	Microcontroller and Microprocessor Systems					3								EEE1036
EEL2186	Circuits and Signals					3								EEL1166
EMF2016	Electromagnetic Theory					3								EEL1176
ENT2016	Solid State Electronics						3							EEE1026
ECE2046	Computer Organization and Architecture						3							EEE1036
EMT2066	Industrial Mathematics							3						EMT1026
EEL2216	Control Theory							3						EMT1026, EEL2186
EEE2146	Microelectronic Circuit Analysis & Design							3						EEE1016, EEL1166
ENT3036	Semiconductor Devices								3					ENT2016
ENT3076	Nano-Science									3				ENT2016
EOP3026	Optoelectronics Devices										3			ENT2016
EPE3016	Capstone Project									3				70 credit hours
ETN3046	Analog and Digital Communications				3									EMT1026
ENT4086	Diagnostic Technology								3					-
ENT4046	N/MEMs											3		-
EEE4166	Digital Integrated Circuits									3				EEE2146, EEE1036
EPE4036	Project											4	4	84 credit hours**, EPE3026
ENT4066	Nanoelectronic Materials and Devices											3		ENT2016, ENT3036
EPE3026	Industrial Training										5			78 credit hours
ENT3056	Advanced Fabrication Technology									3				-
	Elective 1:*													
ECE3166	Advanced Microprocessors						3							ECE2216, ECE1016
ECE3186	Embedded IoT Systems and Application						3							ECE1016
ECE3246	Cybersecurity						3							-
	Elective 2:*													
EEE3076	Power Electronics								3					EEE1026
ECE3086	Multimedia Technology and Applications								3					ECE1016
ECE3066	AI System & Application								3					-
	Arts and Humanities:													
	MPU-U1:													
MPU3123/ MPU3143	TITAS (local)/ Bahasa Melayu Komunikasi 2 (international)											3		-
PWC1010	Workplace Communications					3								-
MPU3323	MPU-U3:												3	-
MPU3113/ MPU3173	MPU-U1: Hubungan Etnik (local)/ Pengajian Malaysia 3 (international)										3			-
EES3036	Project Management									1				60 credit hours
EES3016	Engineer and Society								3					60 credit hours
MPU3213/ Foreign Language	MPU-U2: Bahasa Kebangsaan A/ Foreign Language***											3		-
BHM3086	Law for Engineers								3					-
	MPU-U4: Co-Curriculum												2	-
	Total (139 credit hours)	3	15	15	6	15	15	6	15	16	5	16	12	139

* Elective subjects are subject to change by the faculty
Elective 1 (T8) : Choose 1 subject

** Part1 - 84 credit hours (excluding Arts and Humanities subjects),
** Part 2 - EPE3026 Industrial Training and EPE4036 Project Part 1

*** Malaysians who have fulfilled the Bahasa Malaysia requirement (either having passed Bahasa Malaysia with a credit at SPM level; or having passed the MPU3213 Bahasa Kebangsaan A) shall be required to take a 3CH MPU U2 subject. Student who opt to take a foreign language course within the MPU U2 category must ensure that he/she does not have formal education in the chosen foreign language.