STUDY SCHEME 2021-2025

STUDY SCHEME 2021-2025 BACHELOR OF COMPUTER AND COMMUNICATION SYSTEMS ENGINEERING WITH HONOURS					
Department of Computer and Communication Systems Engineering Faculty of Engineering, Universiti Putra Malaysia					
FIRST SEMESTER			**SECOND SEMESTER**		
CODE	**COURSE**	**CREDIT**	**CODE**	**COURSE**	**CREDIT**
YEAR 1					
ENG3001	Engineering Mathematics I	3(3+0)	ENG3002	Engineering Mathematics II	3(3+0)
ENG3101	Engineering Seminar	1(0+1)	ENG3004	Engineering Statistics	3(3+0)
ENG3202	Computer Programming	3(2+1)	ENG3201	Computer Aided Engineering Drawing	3(1+2)
PRT2009	Agriculture and Life	2(1+1)	ENG3103	Project Management	3(3+0)
SKP2101*	Malaysian Nationhood	3(3+0)	LPE2301	Academic Interaction and Presentation	3(3+0)
FEM2401+	Malaysian Politics and Society	2(2+0)	SKP3122*	Internalization Of Ethics and Civilization	2(2+0)
SKP3112*	Philosophy and Current Issues	2(2+0)	LPM2100+	Malay Language Communication	2(2+0)
SKP3113+ or SKP3123+	Philosophy and Current Issues in Civil Society or Internalization of Ethics and Civilization in Malaysia	3(3+0)	QKXXXXX	Credited Co-curriculum [1]	1(0+1)
QKXXXXX	Credited Co-curriculum [1]	1(0+1)			
	TOTAL	**15* | 15+**		**TOTAL**	**18* | 18+**
YEAR 2					
EEE3801	Electronic Devices	3(3+0)	ECC3831	Basic Electromagnetism	3(3+0)
EEE3811	Circuit Analysis	3(3+0)	EEE3822	Digital Systems	3(3+0)
EEE3821	Digital Circuits	3(3+0)	ECC3851	Signals and Systems	3(3+0)
EEE3841	Microprocessor Technology	2(2+0)	EEE3881	Control Systems	3(3+0)
ECC3214	Computer Architecture	3(3+0)	EEE3871	Analog Systems	3(3+0)
ECC3161	Computer and Communication Systems Practical I	1(0+1)	ECC3162	Computer and Communication Systems Practical II	1(0+1)
LPE2501	Academic Writing	3(3+0)	ENG3102	Engineering Economy	3(3+0)
	TOTAL	**18**		**TOTAL**	**19**
YEAR 3					
EEE3832	Advanced Electromagnetism	3(3+0)	ECC3123	Digital Communications	3(3+0)
ECC3852	Digital Signal Processing	3(3+0)	ECC3613	Optical Communications	3(3+0)
ECC3129	Electronic Communication Circuits	3(3+0)	ECC3712	Computer Networks	3(3+0)
ENG3104	Engineers for Society	3(2+1)	ECC4948	Computer and Communication Systems Design Project	4(0+4)
ECC3313	Embedded Systems Design	3(3+0)	ECC3122	Engineering Algorithms	3(3+0)
ECC3163	Computer and Communication Systems Practical III	1(0+1)	ECC3164	Computer and Communication Systems Practical IV	1(0+1)
	TOTAL	**16**		**TOTAL**	**17**
YEAR 4					
ENG4901	Industrial Training[2]	5(0+5)	ECC3215	Operating Systems	3(3+0)
ENG4949A	Bachelor's Project	2(0+2)	ENG4949B	Bachelor's Project	4(0+4)
ECC4316	Artificial Intelligence	3(3+0)	ECC4525	Mobile Radio and Satellite Communications	3(3+0)
ECCXXXX	Elective I[3]	3(3+0)	ECCXXXX	Elective III[3]	3(3+0)
ECCXXXX	Elective II[3]	3(3+0)	ECCXXXX	Elective IV[3]	3(3+0)
	TOTAL	**16**		**TOTAL**	**16**

	TOTAL CREDITS	**135[*] | 135[+]**

ELECTIVE COURSES OPTIONS

Students have to choose two courses in the First Semester, Year 4 (i.e., one from each Elective courses I and II), and two courses (Electives III and IV) in the Semester Second, Year 4. Proposed selection of courses are as follows:

FIRST SEMESTER			**SECOND SEMESTER**		
CODE	**COURSE**	**CREDIT**	**CODE**	**COURSE**	**CREDIT**
	Elective I			**Elective III & IV**	
ECC4218	Advanced Engineering Programming	3(3+0)	ECC4308	Machine Learning	3(3+0)
ECC4217	Web and Database	3(3+0)	ECC4317	Autonomous Robots	3(3+0)
ECC4271	Big Data Architecture and Management	3(3+0)	ECC4413	Imaging System	3(3+0)
	Elective II		ECC4315	System-On-Chip	3(3+0)
ECC4516	Access Network Technologies	3(3+0)	ECC4716	Core Network Technologies	3(3+0)
ECC4612	Photonic Devices	3(3+0)	ECC4717	Computer and Network Security	3(3+0)
ECC4715	Internet of Things	3(3+0)	ECC4121	Sustainability In Telecommunication Technology	3(3+0)
			ECC4518	Antenna and Propagation	3(3+0)

Notes:

[*]Local student.
[+]International student.
[1] Credited Co-curriculum may be taken at any semester during the duration of study.
[2] Industrial Training is carried out at least for 10 weeks after the sixth (6) semester during inter semester break.
[3] For Elective Technical Course, choose four (4) courses.