



**PROGRAMME STRUCTURE:
BACHELOR OF ELECTRICAL ENGINEERING
2018/2019 SESSION**

(SEPTEMBER INTAKE)

**FACULTY OF ENGINEERING, UNIVERSITY OF MALAYA
KUALA LUMPUR, MALAYSIA**

CURRICULUM STRUCTURE
BACHELOR OF ELECTRICAL ENGINEERING
SESSION 2018/2019
(SEPTEMBER INTAKE)

COURSE COMPONENT	CONTENT	CREDIT
University Courses	• The Islamic and Asian Civilization (TITAS)* / Basic Malay Language**	2
	• Ethnic Relations * / Introduction to Malaysia**	2
	• Basic Entrepreneurship Culture	2
	• English for Communication Programme	6
	• Information Literacy	2
	• Social Engagement	2
	• Co-Curriculum	2
	• Elective Course from Other Faculties	2
	Sub Total	20
Faculty Courses	• Faculty Core Courses	22
	• Faculty Elective Courses	2
	Sub Total	24
Programme Courses	• Programme Core Courses	84
	• Programme Elective Courses	9
	Sub Total	93
Total Credit		137

Notes:

- (1) *Compulsory for Local students.
- (2) ** Compulsory for International students.
- (3) Students are required to take a minimum of 6 credits of English course based on English Proficiency qualification (MUET/IELTS/TOEFL).

ACADEMIC PLANNER
BACHELOR OF ELECTRICAL ENGINEERING
SESSION 2018/2019

YEAR 1						
CODE	COURSE	S1	S2	SS	TOTAL	PRE-REQUISITE
UNIVERSITY COURSES						
GIG1001/ GLT1017	The Islamic and Asian Civilizations (TITAS)*/ Basic Malay Language**	2				
GIG1002/ GIG1006	Ethnic Relations* / Introduction to Malaysia**		2			
GIG1004	Information Literacy		2			
GLT10xx	English Communication Programme I	3				
	Sub-total	5	4			9
FACULTY CORE COURSES						
KIX1001	Engineering Mathematics 1	3				
KIX1002	Engineering Mathematics 2		3			
	Sub-total	3	3			6
PROGRAMME CORE COURSES						
KIE1001	Laboratory 1	1				
KIE1002	Laboratory 2		1			
KIE1003	Digital System	3				
KIE1004	Programming I	3				
KIE1005	Circuit Analysis I	3				
KIE1006	Electronic Physics		3			
KIE1007	Electronic Circuit I		3			
KIE1008	Programming II		3			
	Sub-total	10	10		20	
	Total	18	17		35	

Notes:

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(2) ** Compulsory for International students

YEAR 2						
CODE	COURSE	S1	S2	SS	TOTAL	PRE-REQUISITE
UNIVERSITY COURSES						
GIG1003	Basic of Entrepreneurship Culture	2				
GLT10xx	English Communication Programme II	3				
GIG1005	Social Engagement		2			
	Sub-total	5	2		7	
FACULTY CORE COURSES						
KIX1003	Thinking and Communication Skills		2			
KIX2002	Engineering Economic Analysis		3			
	Sub-total		5		5	
PROGRAMME CORE COURSES						
KIE2001	Laboratory 3	1				
KIE2002	Laboratory 4		1			
KIE2003	Probability and Random Signal	3				
KIE2004	Electronic Circuit II	3				
KIE2005	Circuit Analysis II	3				
KIE2006	Signal and System	3				
KIE2007	Basic Electromagnetics		3			
KIE2008	Communication System		3			
KIE2009	Machines and Drives		3			
	Sub-total	13	10		23	
	Total	18	17		35	

YEAR 3						
CODE	COURSE	S1	S2	SS	TOTAL	PRE-REQUISITE
UNIVERSITY COURSES						
	Co-curriculum		2			
	Elective Course (Other Faculty)	2				
	Sub-total	2	2		4	
FACULTY CORE COURSES						
KIX2004	Engineering Project Management	3				
KIX2001	Integrated Design I	2				
KIX3001	Integrated Design II		4			
KIX2003	Law and Ethics in Engineering		2			
	Sub-total	5	6		11	
FACULTY ELECTIVE COURSES						
KIX3004	Python Programming	2				
	Sub-total	2	2		2	
PROGRAMME CORE COURSES						
KIE3001	Laboratory 5	1				
KIE3002	Laboratory 6		1			
KIE3003	Industrial Training			5		
KIE3004	Applied Electromagnetics	3				
KIE3005	Numerical Analysis	3				
KIE3006	Control System	3				
KIE3008	Power Electronics		3			
KIE3009	Energy Conversion and High Voltage Transmission		3			
KIE3010	Instrumentation		3			
	Sub-total	10	10	5	25	
	Total	19	18	5	42	

YEAR 4						
CODE	COURSE	S1	S2	SS	TOTAL	PRE-REQUISITE
PROGRAMME CORE COURSES						
KIE3007	Digital Signal Processing	3				
KIE4001	Lab 7	1				
KIE4002	Final Year Project	3	3			
KIE4004	Power System	3				
KIE4005	Power Quality		3			
	Sub-total	10	6		16	
PROGRAMME ELECTIVE COURSES						
	Elective Courses	4	5			
	Sub-total	4	5		9	
Total		14	11		25	
TOTAL CREDITS					137	

LIST OF FACULTY ELECTIVE COURSE#:

CODE	COURSE	CREDIT
KIX3004	Python Programming	2

LIST OF PROGRAMME ELECTIVE COURSES#:

Five 2-credit electives are introduced to provide space for “majoring” (instead of just three 3-credit electives)

*Four majors are introduced, as follows:

CODE	COURSE	CREDIT
Power and Energy		
KIE4010	Electrical Energy Conversion Technologies (B)	2
KIE4011	Renewable Energy Technologies (B)	2
KIE4012	Nanotechnology for Sustainable Energy (D)	2
KIE4013	High Voltage Engineering (D)	2
Communications		
KIE4014	Wireless Communications (B)	2
KIE4015	Optical Communications (B)	2
KIE4016	Antenna and Propagation (D)	2
KIE4017	Optical Waveguides (D)	2
Electronics		
KIE4018	VLSI Design (B)	2
KIE4019	Analog VLSI Circuit Design (B)	2
KIE4020	Microwave Electronics and Systems (D)	2
KIE4021	Analog Electronics Design (D)	2
Industrial Automation		
KIE4022	Embedded Systems (B)	2
KIE4023	Digital Control System (B)	2
KIE4024	Optimization (D)	2
KIE4025	Pattern Recognition (D)	2

The list of courses offered is subject to change.

GRADUATION REQUIREMENT CHART

BACHELOR OF ELECTRICAL ENGINEERING

CODE	COURSE	CREDIT	PASSING GRADE	MARKING SCHEME																																																							
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GIG 1001	The Islamic and Asian Civilizations (TITAS)*	2	C	<table border="1"> <thead> <tr> <th>MARKS</th> <th>GRADE</th> <th>GRADE POINTS</th> <th>MEANING</th> </tr> </thead> <tbody> <tr> <td>90-100</td> <td>A+</td> <td>4.00</td> <td>HIGH DISTINCTION</td> </tr> <tr> <td>80-89</td> <td>A</td> <td>4.00</td> <td>DISTINCTION</td> </tr> <tr> <td>75-79</td> <td>A-</td> <td>3.70</td> <td>DISTINCTION</td> </tr> <tr> <td>70-74</td> <td>B+</td> <td>3.30</td> <td>GOOD</td> </tr> <tr> <td>65-69</td> <td>B</td> <td>3.00</td> <td>GOOD</td> </tr> <tr> <td>60-64</td> <td>B-</td> <td>2.70</td> <td>GOOD</td> </tr> <tr> <td>55-59</td> <td>C+</td> <td>2.30</td> <td>PASS</td> </tr> <tr> <td>50-54</td> <td>C</td> <td>2.00</td> <td>PASS</td> </tr> <tr> <td>45-49</td> <td>C-</td> <td>1.70</td> <td>FAIL</td> </tr> <tr> <td>40-44</td> <td>D+</td> <td>1.30</td> <td>FAIL</td> </tr> <tr> <td>35-39</td> <td>D</td> <td>1.00</td> <td>FAIL</td> </tr> <tr> <td>0-34</td> <td>F</td> <td>0.00</td> <td>FAIL</td> </tr> </tbody> </table>				MARKS	GRADE	GRADE POINTS	MEANING	90-100	A+	4.00	HIGH DISTINCTION	80-89	A	4.00	DISTINCTION	75-79	A-	3.70	DISTINCTION	70-74	B+	3.30	GOOD	65-69	B	3.00	GOOD	60-64	B-	2.70	GOOD	55-59	C+	2.30	PASS	50-54	C	2.00	PASS	45-49	C-	1.70	FAIL	40-44	D+	1.30	FAIL	35-39	D	1.00	FAIL	0-34	F	0.00	FAIL
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