

## GRADUATION CHECKLIST

To graduate, students must pass all the stated courses in this checklist. It is the responsibility of the students to ensure that all courses are taken and passed. Students who do not complete any of the course are not allowed to graduate.

NO	COURSE CODE	COURSE NAME	CREDIT EARNED (JKD)	CREDIT COUNTED (JKK)	TICK (/) IF PASSED
<b>MECHANICAL ENGINEERING COURSES</b>					
1	SEMM 1013	Programming for Engineers	3	3	
2	SEMM 1113	Mechanics of Solids I	3	3	
3	SEMM 1203	Statics	3	3	
4	SEMM 1213	Dynamics	3	3	
5	SEMM 1503	Engineering Drawing	3	3	
6	SEMM 1513	Introduction to Design	3	3	
7	SEMM 1911	Experimental Methods	1	1	
8	SEMM 1921	Introduction to Mechanical Engineering	1	1	
9	SEMM 2123	Mechanics of Solids II	3	3	
10	SEMM 2223	Mechanics of Machines & Vibration	3	3	
11	SEMM 2313	Mechanics of Fluids I	3	3	
12	SEMM 2323	Mechanics of Fluids II	3	3	
13	SEMM 2413	Thermodynamics	3	3	
14	SEMM 2433	Applied Thermodynamics & Heat Transfer	3	3	
15	SEMM 2613	Materials Science	3	3	
16	SEMM 2713	Manufacturing Processes	3	3	
17	SEMM 2921	Laboratory I	1	1	
18	SEMM 3023	Applied Numerical Methods	3	3	
19	SEMM 3033	Finite Element Methods	3	3	
20	SEMM 3233	Control Engineering	3	3	
21	SEMM 3523	Component Design	3	3	
22	SEMM 3622	Materials Technology	2	2	
23	SEMM 3813	Industrial Engineering	3	3	
24	SEMM 3823	Engineering Management, Safety & Economics	3	3	
25	SEMM 3915	Industrial Training	5	HL	
26	SEMM 3931	Laboratory II	1	1	
27	SEMM 4902	Engineering Professional Practice	2	2	
28	SEMM 4912	Undergraduate Project I	2	2	
29	SEMM 4924	Undergraduate Project II	4	4	
30	SEMV 3012	Automotive Technology	2	2	
31	SEMV 3413	Internal Combustion Engines	3	3	
32	SEMV 3512	Automotive Engineering Design I	2	2	

33	SEMV 3941	Laboratory III	1	1	
34	SEMV 4212	Automotive Electronics & Instrumentation	2	2	
35	SEMV 4213	Vehicle Dynamics	3	3	
36	SEMV 4523	Automotive Engineering Design II	3	3	
37	SEMV 4793	Automotive Production Technology	3	3	
38	SEMV 4xx3	Elective	3	3	
	SEMV 5xx3	PRISMS Elective			
<b>TOTAL CREDIT FOR MECHANICAL ENGINEERING COURSES (A)</b>			<b>101</b>	<b>96</b>	
<b>ELECTRICAL COURSES (School of Electrical Engineering)</b>					
1	SEEU1002	Electrical Technology	2	2	
2	SEEU2012	Electronics	2	2	
<b>TOTAL CREDIT FOR ELECTRICAL COURSES (B)</b>			<b>4</b>	<b>4</b>	
<b>MATHEMATICS COURSES (Faculty of Science)</b>					
1	SSCE 1693	Engineering Mathematics I	3	3	
2	SSCE 1793	Differential Equations	3	3	
3	SSCE 1993	Engineering Mathematics II	3	3	
4	SSCE 2193	Engineering Statistics	3	3	
<b>TOTAL CREDIT FOR MATHEMATICS COURSES (C)</b>			<b>12</b>	<b>12</b>	
<b>UNIVERSITY GENERAL COURSES</b>					
<b>CLUSTER 1: APPRECIATION OF PHILOSOPHY, VALUE &amp; HISTORY</b>					
1	UHis 1022	Philosophy and Current Issues (for Local Students Only)	2	2	
	UHis 1022 OR UHMS 1182	Philosophy and Current Issues OR Appreciation of Ethics and Civilizations (for International Students Only)			
2	UHMS 1182	Appreciation of Ethics and Civilizations (for Local Students)	2	2	
	UHLM 1012	Malay Language 2 (for International Students)			
<b>CLUSTER 2: GENERIC SKILLS</b>					
1	UHMT 1012	Graduate Success Attributes	2	2	
2	UHMT 2012	Leadership	2	2	
3.	UHMS 2022	Critical and Creative Thinking	2	2	
4.	UHMS 2032	The Human side of Knowledge Management	2	2	
5.	UHMS 2042	Development and Global Issues	2	2	
6.	UHMT 2042	Guidance & Counselling	2	2	
7.	UHMT 2062	Psychology of Adjustment	2	2	
8.	UBSS 2072	Fundamentals of Intellectual	2	2	

		Property Law			
9.	UBSS 2082	Law for Entrepreneurs	2	2	
10.	UBSS 2092	Entrepreneurship and Enterprise Development	2	2	
11.	UBSS 2102	Social Entrepreneurship	2	2	
12.	UHMS 2112	Engineering Communication	2	2	
13.	UHMS 2122	Human Communication	2	2	
14.	UHMT 2132	Professional Ethics	2	2	
15.	UMJT 2142	Professional Ethics, Safety and Health (Ningen Ryoku)	2	2	
<b>CLUSTER 3: KNOWLEDGE EXHANCEMENT</b>					
1.	UHIT 2302	Science and Technology Thinking	2	2	
2.	UHIT 1022	Science, Technology and Mankind	2	2	
3.	UHII 2012	Al-Qur'an and Human Civilization	2	2	
4.	UHIT 2032	Life Institutions and Sustainable Development	2	2	
5.	UHIZ 2042	Future Studies	2	2	
6.	UHIT 2052	Family Law	2	2	
7.	UHIZ 2062	World science	2	2	
8.	UHS 2072	Sustainable Economy	2	2	
9.	UHS 2082	Practice and Concept of Halal Management	2	2	
10.	UHII 2092	Philosophy of Islamic Art	2	2	
11.	UHII 2102	Islam and Health	2	2	
12.	UHII 2132	Islamic Entrepreneurship	2	2	
13.	UETS 2142	Sustainable Energy	2	2	
<b>CLUSTER 4: CO-CURRICULUM &amp; SERVICE LEARNING</b>					
1	UKQX xxx2	Co-curriculum & Service-Learning Elective	2	2	
2	UKQE 3001	Extra-Curricular Experiential Learning	1	1	
<b>CLUSTER 5: LANGUAGE SKILLS</b>					
1	UHLB 1112	English Communication Skills	2	2	
2	UHLB 2122	Academic Communication Skills	2	2	
3	UHLB 3132	Professional Communication Skills	2	2	
4	UHLB 1032	Introductory Academic English	2	2	
5	UHLB 1042	Intermediate Academic English	2	2	
6	UHLA 1112	Arabic Language	2	2	
7	UHLJ 1112	Japanese Language 1	2	2	
8	UHLC 1112	Mandarin Language I	2	2	
9	UHLE 1112	French Language	2	2	
10	UHLN 1112	Persian Language	2	2	

11	UHLJ 1122	Japanese Language for Communication I	2	2	
12	UHLM 1112	Malay Language for Communication	2	2	
<b>CLUSTER 6: ENTREPRENEURSHIP</b>					
1	UBSS 1032	Introduction to Entrepreneurship	2	2	
<b>TOTAL CREDIT FOR UNIVERSITY GENERAL COURSES (D)</b>			<b>23</b>	<b>23</b>	
<b>TOTAL CREDIT TO GRADUATE (A + B + C + D)</b>			<b>140</b>	<b>135</b>	
Note: # Choose one elective either from Cluster 2 (Generic Skills) or Cluster 3 (Knowledge Expansion) for UxxX 2xx2					

#### **OTHER COMPULSORY COURSES – PROFESSIONAL SKILLS CERTIFICATION (PCS)**

- Students are required to enrol and pass FIVE (5) PCS courses, in order to be eligible to graduate
- Please refer to page FE 8 in UG Academic Handbook, for more information about PCS courses.

#### **Compulsory PCS Courses (Enrol all 4 courses)**

1	GSPX XXXX	Design Thinking for Entrepreneur		
2	GSPX XXXX	Talent and Competency Management		
3	GSPX XXXX	Faculty Engineering Safety Pass (FESP) <i>Module 1 – Compulsory for SKM, SKT and SKE students</i> <i>Module 2 – Compulsory for SKA, SC, SKBSK students</i>		
4	GSPX XXXX	English Communication Skills for Graduating Students (ECS)		

#### **Elective PCS Courses (Choose 1 only)**

1	GSPX XXXX	Data Analytic for Organization		
2	GSPX XXXX	Writing		
3	GSPX XXXX	Construction Measurement (Mechanical & Electrical Works)		
4	GSPX XXXX	Professional Ethics and Integrity		
5	GSPX XXXX	More elective courses to be added in future		