

## 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 3233	Control Engineering	3	3	
20	SEMM 3242	Instrumentation	2	2	
21	SEMM 3523	Component Design	3	3	
22	SEMM 3915	Industrial Training	5	HL	
23	SEMM 3931	Laboratory II	1	1	
24	SEMM 3941	Laboratory III	1	1	
25	SEMM 4533	System Design	3	3	
26	SEMM 4902	Engineering Professional Practice	2	2	
27	SEMM 4912	Undergraduate Project I	2	2	
28	SEMM 4924	Undergraduate Project II	4	4	
29	SEMI 3813	Work Design & Productivity	3	3	
30	SEMI 3823	Quality System	3	3	
31	SEMI 3833	Production Planning & Control	3	3	
32	SEMI 3843	Engineering Economy &	3	3	

		Accounting			
33	SEMI 4813	Industrial System Simulation	3	3	
34	SEMI 4823	Operations Research	3	3	
35	SEMI 4833	Safety & Engineering Management	3	3	
36	SEMI 4843	Facility Design	3	3	
37	SEMI 48x3	Industrial Engineering Elective	3	3	
	SEMI 58x3	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	SEEU 1002	Electrical Technology	2	2	
2	SEEU 2012	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	UHS 1022	Philosophy and Current Issues (for Local Students)	2	2	
	UHS 1022 OR UHMS 1182	Philosophy and Current Issues OR Appreciation of Ethics and Civilizations (for International Students)			
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	UHLF 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					

<b>OTHER COMPULSORY COURSES – PROFESSIONAL SKILLS CERTIFICATE (PSC)</b>					
Students are required to enrol and pass FIVE (5) PSC courses, to be eligible to graduate. Enrol the PSC courses as follows:					
<b>COMPULSORY PSC COURSES (Enrol All 3 Courses)</b>					
1	GLRB0010	Design Thinking for Entrepreneur			
2	GLRM0010	Talent and Competency Management			
3	GLRL0010	English Communication Skills for Graduating Students (ECS)			
<b>ELECTIVE PSC COURSES (Choose Any 2 Courses only)</b>					
1	GLRT0010	Data Analytics for Organization			
2	GLRM0020	Professional Ethics and Integrity			
3	GLRT0020	Construction Measurement (Mechanical & Electrical)			
4	GLRT0030	OSHE for Engineering Industry and Laboratory			
5	GLRT0040	OSHE for Construction Industry and Laboratory Works			
6	GLRT0050	Quality Management for Build Environment and Engineering Professionals			
7	GLRT0060	Safety and Health Officer Introductory Course			
8	GLRT0070	Industrial Machinery and Lubrication			
Or any other elective PSC courses offered by UTM iLeague. Information on PSC Courses: <a href="https://ileague.utm.my/utm-professional-skills-certificate-utm-psc/">https://ileague.utm.my/utm-professional-skills-certificate-utm-psc/</a> Online PSC Registration: <a href="https://elearnpsc.utmspace.edu.my/">https://elearnpsc.utmspace.edu.my/</a>					