## **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 courses are not allowed to graduate.

NO.	CODE	COURSE	CREDIT EARNED (JKD)	CREDIT COUNTED (JKK)	TICK (√) IF PASSED
CHEM	ICAL-GAS ENGI	NEERING COURSES			
1	SETG 1233	Introduction to Chemical and Gas Engineering	3	3	
2	SETG 1313	Mechanics of Engineering	3	3	
3	SETG 1323	Engineering Drawing	3	3	
4	SETG 1333	Thermodynamics	3	3	
5	SETG 1413	Mass Balance	3	3	
6	SETG 2133	Combustion Engineering and Gas Utilisation	3	3	
7	SETG 2343	Fluid Mechanics	3	3	
8	SETG 2363	Material Engineering	3	3	
9	SETG 2423	Energy Balance	3	3	
10	SETG 2433	Chemical Engineering Thermodynamics	3	3	
11	SETG 2443	Transport Processes	3	3	
12	SETG 2741	Fluid Mechanics Laboratory	1	1	
13	SETG 3123	Gas Processing and Liquefaction	3	3	
14	SETG 3213	Gas Transmission and Distribution	3	3	
15	SETG 3373	Environmental Engineering and Sustainability	3	3	
16	SETG 3383	Safety and Health in Petrochemical Industry	3	3	
17	SETG 3453	Chemical Engineering Computation	3	3	
18	SETG 3463	Chemical Reaction Engineering	3	3	
19	SETG 3473	Separation Process	3	3	
20	SETG 3483	Process Control and Instrumentation	3	3	
21	SETG 3721	Combustion Engineering and Gas Utilisation Laboratory	1	1	

22	SETG 3731	Separation Process Laboratory	1	1	
23	SETG 3751	Thermodynamics and Material Engineering Laboratory	1	1	
24	SETG 3812	Undergraduate Project I	2	2	
25	SETG 3915	Industrial Training	5	HL	
26	SETG 4223	Gas Storage and Reticulation System	3	3	
27	SETG 4393	Engineering Economics and Project Management	3	3	
28	SETG 4493	Plant Design	3	3	
29	SETG 4610	Gas Engineering Seminar	0 (HL)	0 (HL)	
30	SETG 4711	Gas Flow System Laboratory	1	1	
31	SETG 4761	Pollution Control and Reaction Laboratory	1	1	
32	SETG 4771	Process Control Laboratory	1	1	
33	SETG 4824	Undergraduate Project II	4	4	
34	SETG 4834	Plant Design Project	4	4	
35	SETG 4**3	Elective I	3	3	
55	SET* 5**3	PRISMS Elective I	3	3	
36	SET* ***3	Elective II	3	3	
30	SET* 5**3	PRISMS Elective II	3		
37	SET* ***3	Elective III	3	3	
31	SET* 5**3	PRISMS Elective III	S		
		TOTAL CREDIT OF	97	92	
		CHEMICAL-GAS			
		ENGINEERING COURSES			
		(a)			
		NCE/ TECHNOLOGY COURSES aculty of Engineering)	3		
1	SECP 1013	Programming Technique I	3	3	
2	SEEU 2003	Electrical Technology	3	3	
3	SETG 2353	Introduction to Organic and Analytical Chemistry for Engineers	3	3	
4	SSCE 1693	Engineering Mathematics I	3	3	
5	SSCE 1793	Differential Equations	3	3	
6	SSCE 1993	Engineering Mathematics II	3	3	
		TOTAL CREDIT OF MATHEMATICS/ SCIENCE/ TECHNOLOGY COURSES (b)	18	18	

UNIVERSITY GENERAL COURSES						
	· 1: Appreciation of Philosophy, Value and History y of Social Sciences and Humanities)					
	UHMS 1182	Appreciation of Ethics and Civilizations (for Local Students)	2	2		
1	UHMS 1022	Philosophy and Current Issues (for International Students)				
	OR	OR				
	UHMS 1182	Appreciation of Ethics and Civilizations (for International Students				
2	UHIS 1022	Philosophy and Current Issues (for Local Students)				
2	UHLM 1012	Malay Language Communication 2 (for International Students)	2	2		
Cluste	ster 2: Generic Skills					
1	UHMT 1012	Graduate Success Attribute	2	2		
Cluste	r 3: Knowledge	Enhancement				
1	UHIT 2302	The Thought of Science and Technology	2	2		
2	UETS 2142	Energy Sustainability (University General Elective)	2	2		
Cluste	r 4: Co-Curriculu	um and Service Learning				
1	UKQF 2**2	Co-Curriculum	2	2		
2	UKQT 3001	Extracurricular Experiential Learning (ExCEL)	1	1		
Cluster 5: Language Skills						
(Language Academy, Faculty of Social Sciences and Humanities)						
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	UHL* 1112	Foreign Language Elective	2	2		

Cluste	Cluster 6: Entrepreneurial Skills				
1	UBSS 1032	Introduction to	2	2	
		Entrepreneurship			
		TOTAL CREDIT of	23	23	
		UNIVERSITY GENERAL			
		COURSES (c)			
		TOTAL CREDIT TO	138	133	
		GRADUATE			
		(a + b + c)			

## OTHER COMPULSORY COURSES - PROFESSIONAL SKILLS CERTIFICATE (PSC)

Students are required to enrol and pass FIVE (5) PSC courses, to be eligible to graduate. Enrol the PSC courses as follows:

## COMPULSORY PSC COURSES (Enrol All 3 Courses)

1	GLRB0010	Design Thinking for Entrepreneur	
2	GLRM0010	Talent and Competency Management	
3	GLRL0010	English Communication Skills for Graduating Students (ECS)	

## **ELECTIVE PSC COURSES (Choose Any 2 Courses only)**

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		
	O			

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>