

## **CHEMICAL ENGINEERING ACADEMIC ASSESSMENT CHECKLIST**

The syllabus checklist below is based on the approved discipline topics used by APEGA's Executive Committee of the Board of Examiners (BOE) to either confirm or meet academic shortfalls or deficiencies. Please use in conjunction with the course descriptions provided here: <a href="https://www.apega.ca/apply/exams/technical/courses/">https://www.apega.ca/apply/exams/technical/courses/</a>.

This form is provided for assessment purposes only (06.02.2020).

2016		✓		
Preliminary Exams	20-Prelim-1 Calculus			
	20-Prelim-2 Computing			
	20-Prelim-3 Physics			
	20-Prelim-4 Chemistry			
Basic Studies &	04-BS-1 Mathematics			
Compulsory Exams	04-BS-2 Probability and Statistics			
	04-BS-3 Statics and Dynamics			
	04-BS-7 Mechanics of Fluids			
	04-BS-10 Engineering Thermodynamics			
	04-BS-12 Organic Chemistry			
Optional Exams	04-BS-4 Electric Circuits and Power			
(Requires 2)	04-BS-5 Advanced Mathematics			
	04-BS-6 Mechanics of Materials			
	04-BS-11 Properties of Materials			
	04-BS-13 Biology			
	04-BS-14 Geology			
	04-BS-15 Engineering Graphics			
Chemical	16-Chem-A1 Process Balances and Chemical Thermodynamics			
Group A	16-Chem-A2 Unit Operations and Separation Processes			
(Requires 6)	16-Chem-A3 Heat and Mass Transfer			
	16-Chem-A4 Chemical Reactor Engineering			
	16-Chem-A5 Chemical Plant Design and Economics			
	16-Chem-A6 Process Dynamics and Control			
Chemical Group B (Require 3)	16-Chem-B1 Transport Phenomena			
	16-Chem-B2 Environmental Engineering			
	16-Chem-B3 Simulation, Modelling, and Optimization			
	16-Chem-B4 Biochemical Engineering			
	16-Chem-B5 Pulp and Paper Technology			
	16-Chem-B6 Petroleum Refining and Petrochemicals			
	16-Chem-B7 Extractive Metallurgy			
	16-Chem-B8 Polymer Engineering			

	16-Chem-B9	Advanced Materials	
	16-Chem-B10	Life Cycle Assessment (LCA)	
	16-Chem-B11	Nuclear and Nuclear Chemical Processes	
	16-Chem-B12	Petroleum Production Operations	
	16-Chem-B13	Fundamental Reservoir Engineering	
Complementary Studies	98-CS-1 E	Ingineering Economics	
	98-CS-2 E	Engineering in Society - Health, Safety, and the Environment	
	98-CS-3 N	lanagement Concepts for Engineers	