

## MECHANICAL 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-3 Statics and Dynamics	
	04-BS-6 Mechanics of Materials	
	04-BS-7 Mechanics of Fluids	
	04-BS-10 Engineering Thermodynamics	
	04-BS-11 Properties of Materials	
	04-BS-15 Engineering Graphics	
Optional Exams	04-BS-2 Probability and Statistics	
(Requires 1)	04-BS-4 Electric Circuits and Power	
	04-BS-5 Advanced Mathematics	
	04-BS-12 Organic Chemistry	
Mechanical Group A (Requires 6: A1-A5	16-Mec-A1 Applied Thermodynamics and Heat Transfer	
	16-Mec-A2 Kinematics and Dynamics of Machines	
and one of A6 & A7)	16-Mec-A3 System Analysis and Control	
	16-Mec-A4 Design and Manufacture of Machine Elements	
	16-Mec-A5 Electrical; and Electronics Engineering	
	16-Mec-A6 Fluid Machinery	
	16-Mec-A7 Advanced Strength of Materials	
Mechanical Group B (Require 3)	16-Mec-B1 Advanced Machine Design	
(Require 3)	16-Mec-B2 Environmental Control in Buildings	
	16-Mec-B3 Energy Conversion and Power Generation	
	16-Mec-B4 Integrated Manufacturing Systems	
	16-Mec-B5 Product Design and Development	
	16-Mec-B6 Advanced Fluid Mechanics	
	16-Mec-B7 Aero and Space Flight	
	16-Mec-B8 Engineering Materials	
	16-Mec-B9 Advanced Engineering Structures	
	16-Mec-B10 Finite Element Analysis	

	16-Mec-B11 Acoustics and Noise Control	
	16-Mec-B12 Robotics	
	16-Mec-B13 Biomechanics (04-Bio-A4)	
Complementary	98-CS-1 Engineering Economics	
Studies	98-CS-2 Engineering in Society - Health, Safety, and the Environment	
	98-CS-3 Management Concepts for Engineers	