

SOFTWARE ENGINEERING ACADEMIC SELF-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: <https://www.apega.ca/apply/exams/technical/courses/>.

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

2019		✓
Preliminary Exams	20-Prelim-1 Calculus	
	20-Prelim-2 Computing	
	20-Prelim-3 Physics	
	20-Prelim-4 Chemistry	
Basic Studies & Compulsory Exams	04-BS-1 Mathematics	
	04-BS-2 Probability and Statistics	
	04-BS-4 Electric Circuits and Power	
	04-BS-5 Advanced Mathematics	
	04-BS-8 Digital Logic Circuits	
	04-BS-16 Discrete Mathematics	
Optional Exams (Requires 2)	04-BS-3 Statics and Dynamics	
	04-BS-6 Mechanics of Materials	
	04-BS-7 Mechanics of Fluids	
	04-BS-9 Basic Electromagnetics	
	04-BS-10 Engineering Thermodynamics	
	04-BS-11 Properties of Materials	
	04-BS-15 Engineering Graphics	
Software Group A (Requires 7)	19-Soft-A1 Algorithms & Data Structures	
	19-Soft -A2 Computer Architecture and Operating Systems	
	19-Soft -A3 Software Design	
	19-Soft -A4 Real Time Systems	
	19-Soft -A5 Requirements and Specifications	
	19-Soft -A6 Software Quality Assurance	
	19-Soft -A7 Software Development Process	
Software Group B (Require 3)	19-Soft -B1 Advanced Software Design	
	19-Soft -B2 User interface	
	19-Soft -B3 Security	
	19-Soft -B4 Dependable systems	
	19-Soft -B5 Software Modeling & Verification (Formal Methods)	
	19-Soft -B6 Software Project Management	
	19-Soft -B7 Reverse Engineering, Maintenance & Evolution	

	19-Soft -B8	Distributed Systems	
	19-Soft -B9	Parallel Computing	
	19-Soft -B10	Networking and Communications	
	19-Soft -B11	Process Control Systems	
	19-Soft -B12	Engineering Computation: Numerics	
	19-Soft -B13	Performance Analysis & Simulation	
	19-Soft -B14	Safety Critical Systems	
	19-Soft -B15	Artificial Intelligence	
	19-Soft -B17	Programming Languages, semantics and implementation	
	19-Soft -B18	Data Visualization	
Complementary Studies	98-CS-1	Engineering Economics	
	98-CS-2	Engineering in Society - Health, Safety, and the Environment	
	98-CS-3	Management Concepts for Engineers	