

PROGRAM UPDATE

Issued: October 20, 2023

Trade: Industrial Electrician

To: SkilledTradesBC Training Providers
Articulation Chair
System Liaison Person
Youth Train in Trades School Districts

Subject: **Industrial Electrician Interprovincial Exams aligned to the 2021 RSOS will be implemented**

From: SkilledTradesBC Program Standards

Effective Date: November 15, 2023

Summary: Interprovincial (IP) exams aligned to the 2021 **Industrial Electrician** Red Seal Occupational Standard (RSOS) will be implemented by SkilledTradesBC as of November 15, 2023. Candidates who write an Industrial Electrician IP exam on or after November 15, 2023 will receive an exam aligned to the 2021 RSOS. Candidates will be provided with a 2021 Canadian Electrical Code book.

IP Table: The IP table can be found at <https://skilledtradesbc.ca/electrician-industrial>



Industrial Electrician

Inter-provincial examinations – Tasks and related number of questions
Number of questions on each exam - 100

Based on 2021 RSOS

Major Work Activity	Task	Number of Questions
A – PERFORMS COMMON OCCUPATIONAL SKILLS	Task 1 - Performs safety-related functions	2
	Task 2 - Uses tools and equipment	2
	Task 3 - Organizes work	2
	Task 4 - Fabricates and installs support components	1
	Task 5 - Commissions and decommissions electrical systems	2
	Task 6 - Uses communication and mentoring techniques	0
B – INSTALLS AND MAINTAINS GENERATING, TRANSMISSION, DISTRIBUTION AND SERVICE SYSTEMS	Task 7 - Installs and maintains utility and non-utility supply services and metering equipment	3
	Task 8 - Installs and maintains protection devices	4
	Task 9 - Installs and maintains low-voltage distribution systems	3
	Task 10 - Installs and maintains power conditioning systems	2
	Task 11 - Installs and maintains bonding, grounding and ground-fault protection and detection systems	3
	Task 12 - Installs and maintains power generating and conversion systems	2
	Task 13 - Installs and maintains renewable energy generating and energy storage systems	1
	Task 14 - Installs and maintains high-voltage systems	2
	Task 15 - Installs and maintains transformers	3
C – INSTALLS AND MAINTAINS WIRING SYSTEMS	Task 16 - Installs and maintains raceways, cables, conductors and enclosures	5
	Task 17 - Installs and maintains branch circuitry and devices	5
	Task 18 - Installs and maintains heating, ventilation and air-conditioning (HVAC) electrical components	3
	Task 19 - Installs and maintains electric heating systems and controls	3
	Task 20 - Installs and maintains exit and emergency lighting systems	2
	Task 21 - Installs and maintains cathodic protection systems	2
D – INSTALLS AND MAINTAINS ROTATING AND OTHER FIXED EQUIPMENT AND CONTROL SYSTEMS	Task 22 - Installs and maintains motor starters and control devices	7
	Task 23 - Installs and maintains drives	5
	Task 24 - Installs and maintains other fixed equipment and associated controls	3
	Task 25 - Installs and maintains motors	6
E – INSTALLS AND MAINTAINS SIGNALLING AND COMMUNICATION SYSTEMS	Task 26 - Installs and maintains signalling systems	4
	Task 27 - Installs and maintains communication systems	3
	Task 28 - Installs and maintains building automation systems	3
F – INSTALLS AND MAINTAINS PROCESS CONTROL SYSTEMS	Task 29 - Installs and maintains input/output (I/O) devices	8
	Task 30 - Installs, programs and maintains automated control systems	6
	Task 31 - Installs and maintains pneumatic and hydraulic control systems	3
		100

Details: The Interprovincial Red Seal exam is a summative assessment intended to test an apprentice's trade knowledge gained through both on-the-job experience and technical training. Exam questions are developed by certified trade worker subject matter experts (SMEs) as well as instructors and are intended to reflect trade practices in Canada. The exams are edited, translated, and peer reviewed by additional SMEs before they are implemented. The exams are developed to test the sub-tasks of the most recent Red Seal Occupational Standard.

The Industrial Electrician 2021 RSOS can be downloaded here: <https://www.red-seal.ca/eng/trades/industrialelectric/overview.shtml>

A comparative analysis of the sub-task changes from the previous standard can be found on the SkilledTradesBC trade page (<https://skilledtradesbc.ca/electrician-industrial>).

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