

INSTRUMENTATION AND CONTROL TECHNICIAN INFORMATION SHEET 2023

Employers, journeypersons and instructors play a key role in the success of apprenticeship in Newfoundland and Labrador. By working collaboratively with government, stakeholders support the apprenticeship system in the development of a highly skilled workforce.

To receive a Red Seal endorsement, apprentices must pass the Red Seal examination. In 2022, Newfoundland and Labrador's Red Seal exam pass rate for the Instrumentation and Control Technician trade was 50 per cent. This is above the 2022 national average of 46 per cent. As supervising journeypersons and instructors, you are integral in helping train and prepare apprentices to write the Red Seal exam. Apprentices should be exposed to, have the ability to practice, and be able to explain how to complete all skills in the logbook; this will assist them in being successful in their Red Seal exam.

Given the broad scope of the trade, it can be difficult to know where to focus to prepare apprentices. To help inform your training plan with the apprentice, the Apprenticeship and Trades Certification Division (ATCD) has identified a list of five lower performing tasks demonstrated by Newfoundland and Labrador apprentices on the Red Seal exam for your trade*. We encourage you to review the list below with apprentices. Details on these tasks can be found in the national occupational standard for your trade – the National Occupational Analysis (NOA): [National Occupational Analysis - Instrumentation and Control Technician](#)

Task/Sub-Task	Description	Number of Questions on RS Exam (out of 125)	NOA Page Number
Task B-5	Installs and services motion, speed, position and vibration devices.	5 questions	Pg. 23
B-5.01	Installs motion, speed, position and vibration devices.		
B-5.02	Maintains motion, speed, position and vibration devices.		
B-5.03	Diagnoses motion, speed, position and vibration devices.		
B-5.04	Repairs motion, speed, position and vibration devices.		
Task D-13	Installs and services pneumatic equipment.	4 questions	Pg. 52
D-13.01	Installs pneumatic equipment.		
D-13.02	Maintains pneumatic equipment.		
D-13.03	Diagnoses pneumatic equipment.		
D-13.04	Repairs pneumatic equipment.		
Task F-21	Installs and services gateways, bridges and media converters.	3 questions	Pg. 77
F-21.01	Performs installation and configuration of gateways, bridges and media converters.		

Task/Sub-Task	Description	Number of Questions on RS Exam (out of 125)	NOA Page Number
F-21.02	Diagnoses gateways, bridges and media converters.		
F-21.03	Performs maintenance and repairs on gateways, bridges and media converters.		
Task G-24	Installs and services programmable logic controllers (PLCs).	6 questions	Pg. 86
G-24.01	Installs PLCs.		
G-24.02	Configures PLCs.		
G-24.03	Performs maintenance, diagnosis and repairs on PLCs.		
Task G-27	Installs and services Supervisory Control and Data Acquisition (SCADA) systems.	3 questions	Pg. 95
G-27.01	Installs SCADA systems.		
G-27.02	Configures SCADA systems.		
G-27.03	Performs maintenance, diagnosis and repairs on SCADA systems.		

**The information above represents the last three years where Red Seal exam data is available (May 2020 – May 2023).*

For additional resources to assist apprentices (e.g., Self-Assessment Guide, Red Seal Practice Questions, etc.), please visit the **Trade Profile** section on the ATCD website: www.gov.nl.ca/atcd/designated-trades/trade-profiles/

ATCD would like to thank you for your contribution towards apprenticeship training and investing in the future of skilled trades in Newfoundland and Labrador.