

## Construction Electrician RSOS (2021) Subtask to Unit Comparison

RSOS Subtask		Manitoba Unit(s)
<b>Task A-1 – Performs safety-related functions.</b>		
A-1.01	Uses personal protective equipment (PPE) and safety equipment.	A2 Trade Safety Awareness D5 Blueprints and Project Planning D7 Pre-Interprovincial Exam Review
A-1.02	Maintains safe work environment.	A2 Trade Safety Awareness D5 Blueprints and Project Planning
A-1.03	Performs lock-out and tag-out procedures.	A2 Trade Safety Awareness B4 Motor Controls C4 Industrial Control Systems C5 AC Machines and Maintenance D3 Automation D7 Pre-Interprovincial Exam Review
<b>Task A-2 – Uses tools and equipment.</b>		
A-2.01	Uses common and specialty tools and equipment.	A6 Residential Wiring Practices B2 Commercial Code Applications B4 Motor Controls C4 Industrial Control Systems D4 Fire Alarms
A-2.02	Uses access equipment.	A2 Trade Safety Awareness
A-2.03	Uses rigging, hoisting and lifting equipment.	A2 Trade Safety Awareness
<b>Task A-3 – Organizes work.</b>		
A-3.01	Interprets plans, drawings and specifications.	A5 Residential Electrical Code A6 Residential Wiring Practices B2 Commercial Code Applications C1 Industrial Electrical Code D5 Blueprints and Project Planning
A-3.02	Organizes materials and supplies.	A3 Computer and Communication Skills B2 Commercial Code Applications C1 Industrial Electrical Code D5 Blueprints and Project Planning
A-3.03	Plans project tasks and procedures.	A3 Computer and Communication Skills B2 Commercial Code Applications C4 Industrial Control Systems D5 Blueprints and Project Planning
A-3.04	Prepares worksite.	A2 Trade Safety Awareness B2 Commercial Code Applications C4 Industrial Control Systems D5 Blueprints and Project Planning
A-3.05	Finalizes required documentation.	A3 Computer and Communication Skills B2 Commercial Code Applications C5 AC Machines and Maintenance D5 Blueprints and Project Planning
<b>Task A-4 – Fabricates and installs support components.</b>		
A-4.01	Fabricates support structures.	A5 Residential Electrical Code

		A6 Residential Wiring Practices B1 Commercial Electrical Code C1 Industrial Electrical Code D7 Pre-Interprovincial Exam Review
A-4.02	Installs brackets, hangers and fasteners.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code C1 Industrial Electrical Code D7 Pre-Interprovincial Exam Review
A-4.03	Installs seismic restraint systems.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code C1 Industrial Electrical Code D5 Blueprints and Project Planning
<b>Task A-5 – Commissions and decommissions electrical systems.</b>		
A-5.01	Performs startup and shutdown procedures.	A2 Trade Safety Awareness B4 Motor Controls C1 Industrial Electrical Code C4 Industrial Control Systems C5 AC Machines and Maintenance D1 Advanced Electrical Code D3 Automation
A-5.02	Performs commissioning and decommissioning of systems.	A6 Residential Wiring Practices B4 Motor Controls C1 Industrial Electrical Code C4 Industrial Control Systems C5 AC Machines and Maintenance D1 Advanced Electrical Code D3 Automation
<b>Task A-6 – Uses communication and mentoring techniques.</b>		
A-6.01	Uses communication techniques.	A3 Computer and Communication Skills
A-6.02	Uses mentoring techniques.	D6 Journey person Trainer
<b>Task B-7 – Installs, services and maintains consumer/supply services and metering equipment.</b>		
B-7.01	Installs single-phase consumer/supply services and metering equipment.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications D1 Advanced Electrical Code
B-7.02	Installs three-phase consumer/supply services and metering equipment.	C1 Industrial Electrical Code C2 Three Phase Theory and Transformers
B-7.03	Performs servicing and maintenance of single-phase consumer/supply services and metering equipment.	A5 Residential Electrical Code B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code
B-7.04	Performs servicing and maintenance of three-phase consumer/supply services and metering equipment.	C1 Industrial Electrical Code C2 Three Phase Theory and Transformers
<b>Task B-8 – Installs, services and maintains protection devices.</b>		
B-8.01	Installs overcurrent protection devices.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code C1 Industrial Electrical Code D1 Advanced Electrical Code
B-8.02	Installs ground fault, arc fault and surge protection devices.	A5 Residential Electrical Code A6 Residential Wiring Practices

		B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code D2 Power Quality
B-8.03	Performs servicing and maintenance of protection devices.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C5 AC Machines and Maintenance D1 Advanced Electrical Code
<b>Task B-9 – Installs, services and maintains power distribution equipment.</b>		
B-9.01	Installs power distribution equipment.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code C1 Industrial Electrical Code C2 Three Phase Theory and Transformers D1 Advanced Electrical Code
B-9.02	Performs servicing and maintenance of power distribution equipment.	A5 Residential Electrical Code B1 Commercial Electrical Code C1 Industrial Electrical Code C2 Three Phase Theory and Transformers C5 AC Machines and Maintenance D1 Advanced Electrical Code
<b>Task B-10 – Installs, services and maintains power conditioning, uninterruptible power supply (UPS) and surge suppression systems.</b>		
B-10.01	Installs power conditioning, UPS and surge suppression systems.	D2 Power Quality
B-10.02	Performs servicing and maintenance of power conditioning, UPS and surge suppression systems.	B2 Commercial Code Applications D2 Power Quality
<b>Task B-11 – Installs, services and maintains bonding and grounding, and ground fault protection and detection systems.</b>		
B-11.01	Installs bonding and grounding systems.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
B-11.02	Installs ground fault protection and detection systems.	B1 Commercial Electrical Code C1 Industrial Electrical Code D2 Power Quality
B-11.03	Installs lightning protection systems.	B1 Commercial Electrical Code C1 Industrial Electrical Code D2 Power Quality
B-11.04	Performs servicing and maintenance of bonding and grounding systems.	A5 Residential Electrical Code A7 DC Fundamentals C2 Three Phase Theory and Transformers C5 AC Machines and Maintenance D1 Advanced Electrical Code
<b>Task B-12 – Installs, services and maintains power generation and conversion systems.</b>		
B-12.01	Installs alternating current (AC) generating systems.	A7 DC Fundamentals B3 AC Fundamentals C1 Industrial Electrical Code C2 Three Phase Theory and Transformers

		C5 AC Machines and Maintenance D1 Advanced Electrical Code
B-12.02	Performs servicing and maintenance of AC generating systems.	C5 AC Machines and Maintenance
B-12.03	Installs direct current (DC) generating and conversion systems. (NOT COMMON CORE)	B6 DC Machines and Controls
B-12.04	Performs servicing and maintenance of DC generating and conversion systems. (NOT COMMON CORE)	B6 DC Machines and Controls
<b>Task B-13 – Installs, services and maintains renewable energy generating and storage systems.</b>		
B-13.01	Installs renewable energy generating and storage systems.	B2 Commercial Code Applications D1 Advanced Electrical Code
B-13.02	Performs servicing and maintenance of renewable generating and storage energy systems.	B2 Commercial Code Applications D1 Advanced Electrical Code
<b>Task B-14 – Installs, services and maintains high voltage systems.</b>		
B-14.01	Installs high voltage equipment.	C1 Industrial Electrical Code D1 Advanced Electrical Code
B-14.02	Installs high voltage cables.	D1 Advanced Electrical Code
B-14.03	Performs servicing and maintenance of high voltage systems.	C1 Industrial Electrical Code D1 Advanced Electrical Code
<b>Task B-14 – Installs, services and maintains high voltage systems.</b>		
B-14.01	Installs high voltage equipment.	C1 Industrial Electrical Code D1 Advanced Electrical Code
B-14.02	Installs high voltage cables.	D1 Advanced Electrical Code
B-14.03	Performs servicing and maintenance of high voltage systems.	C1 Industrial Electrical Code D1 Advanced Electrical Code
<b>Task B-15 – Installs, services and maintains transformers.</b>		
B-15.01	Installs extra-low-voltage transformers.	A5 Residential Electrical Code A6 Residential Wiring Practices B2 Commercial Code Applications C2 Three Phase Theory and Transformers D1 Advanced Electrical Code
B-15.02	Installs low-voltage single-phase transformers.	B2 Commercial Code Applications C2 Three Phase Theory and Transformers
B-15.03	Installs low-voltage three-phase transformers.	C1 Industrial Electrical Code C2 Three Phase Theory and Transformers
B-15.04	Installs high-voltage transformers.	C1 Industrial Electrical Code C2 Three Phase Theory and Transformers
B-15.05	Performs servicing and maintenance of transformers.	C2 Three Phase Theory and Transformers C5 AC Machines and Maintenance
<b>Task C-16 – Installs, services and maintains raceways, conductors, cables and enclosures.</b>		
C-16.01	Installs conductors and cables.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
C-16.02	Installs conduit and fittings.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code

		D1 Advanced Electrical Code
C-16.03	Installs raceways.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
C-16.04	Installs boxes and enclosures.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
C-16.05	Performs servicing and maintenance of raceways, conductors, cables and enclosures.	A5 Residential Electrical Code B1 Commercial Electrical Code C1 Industrial Electrical Code D1 Advanced Electrical Code
<b>Task C-17 – Installs, services and maintains branch circuitry and devices.</b>		
C-17.01	Installs luminaires.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
C-17.02	Installs wiring devices.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
C-17.03	Installs lighting controls.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code B2 Commercial Code Applications C1 Industrial Electrical Code D1 Advanced Electrical Code
C-17.04	Installs lighting standards.	A5 Residential Electrical Code B1 Commercial Electrical Code C1 Industrial Electrical Code
C-17.05	Performs servicing of branch circuitry.	A5 Residential Electrical Code A6 Residential Wiring Practices B1 Commercial Electrical Code C1 Industrial Electrical Code D1 Advanced Electrical Code
C-17.06	Installs, services and maintains airport visual aid systems.	D1 Advanced Electrical Code
C-17.07	Installs, services and maintains traffic signal lights and controls.	D1 Advanced Electrical Code D3 Automation
<b>Task C-18 – Installs, services and maintains heating, ventilating and air-conditioning (HVAC) systems.</b>		
C-18.01	Connects HVAC systems and associated equipment.	C1 Industrial Electrical Code C4 Industrial Control Systems
C-18.02	Installs HVAC controls.	C4 Industrial Control Systems
C-18.03	Performs servicing and maintenance of HVAC systems and controls.	C4 Industrial Control Systems
<b>Task C-19 – Installs, services and maintains electric heating systems.</b>		
C-19.01	Installs electric heating systems.	A5 Residential Electrical Code

		B1 Commercial Electrical Code
C-19.02	Installs electric heating system controls.	A5 Residential Electrical Code B1 Commercial Electrical Code
C-19.03	Performs servicing and maintenance of electric heating systems and controls.	B2 Commercial Code Applications
<b>Task C-20 – Installs, services and maintains exit and emergency lighting systems.</b>		
C-20.01	Installs exit and emergency lighting.	B2 Commercial Code Applications
C-20.02	Performs servicing and maintenance of exit and emergency lighting systems.	B2 Commercial Code Applications
<b>Task C-21 – Installs, services and maintains cathodic protection systems.</b>		
C-21.01	Installs cathodic protection systems.	B2 Commercial Code Applications
C-21.02	Performs servicing and maintenance of cathodic protection systems.	B2 Commercial Code Applications
<b>Task D-22 – Installs, services and maintains motor starters and controls.</b>		
D-22.01	Installs motor starters.	B4 Motor Controls C4 Industrial Control Systems
D-22.02	Performs servicing and maintenance of motor starters.	B4 Motor Controls C4 Industrial Control Systems
D-22.03	Installs motor control devices.	B4 Motor Controls C4 Industrial Control Systems
D-22.04	Performs servicing and maintenance of motor controls.	B4 Motor Controls C4 Industrial Control Systems
<b>Task D-23 – Installs, services and maintains drives.</b>		
D-23.01	Installs AC drives.	C4 Industrial Control Systems
D-23.02	Performs servicing and maintenance of AC drives.	C3 Electronic Concepts II C4 Industrial Control Systems
D-23.03	Installs DC drives.	C4 Industrial Control Systems
D-23.04	Performs servicing and maintenance of DC drives.	C3 Electronic Concepts II C4 Industrial Control Systems
<b>Task D-24 – Installs, services and maintains motors.</b>		
D-24.01	Installs single-phase motors.	B1 Commercial Electrical Code C5 AC Machines and Maintenance D7 Pre-Interprovincial Exam Review
D-24.02	Performs servicing and maintenance of single-phase motors.	B1 Commercial Electrical Code C5 AC Machines and Maintenance D7 Pre-Interprovincial Exam Review
D-24.03	Installs three-phase motors.	C1 Industrial Electrical Code D7 Pre-Interprovincial Exam Review
D-24.04	Performs servicing and maintenance of three-phase motors.	C5 AC Machines and Maintenance D7 Pre-Interprovincial Exam Review
D-24.05	Installs DC motors.	B6 DC Machines and Controls C1 Industrial Electrical Code D7 Pre-Interprovincial Exam Review
D-24.06	Performs servicing and maintenance of DC motors.	B6 DC Machines and Controls C5 AC Machines and Maintenance D7 Pre-Interprovincial Exam Review
<b>Task D-25 – Installs, programs, services and maintains automated control systems.</b>		
D-25.01	Installs automated control systems.	D3 Automation
D-25.02	Performs servicing and maintenance of automated control systems.	D3 Automation
D-25.03	Programs and configures automated control systems.	D3 Automation

<b>Task E-26 – Installs, services and maintains signalling systems.</b>		
E-26.01	Installs fire alarm systems.	D4 Fire Alarms
E-26.02	Performs servicing and maintenance of fire alarm systems.	B5 Electronic Concepts I D4 Fire Alarms
E-26.03	Installs security and surveillance systems.	D1 Advanced Electrical Code
E-26.04	Performs servicing and maintenance of security and surveillance systems.	D1 Advanced Electrical Code
<b>Task E-27 – Installs, services and maintains communication systems.</b>		
E-27.01	Installs voice/data/video (VDV) and community antenna television (CATV) systems.	A6 Residential Wiring Practices D7 Pre-Interprovincial Exam Review
E-27.02	Installs public address (PA) and intercom systems.	A5 Residential Electrical Code D1 Advanced Electrical Code
E-27.03	Installs nurse call systems.	A5 Residential Electrical Code D1 Advanced Electrical Code
E-27.04	Performs servicing and maintenance of communication systems.	A6 Residential Wiring Practices B2 Commercial Code Applications D1 Advanced Electrical Code
<b>Task E-28 – Installs, services and maintains integrated control systems.</b>		
E-28.01	Installs building automation systems.	D3 Automation D4 Fire Alarms
E-28.02	Installs building control systems.	D3 Automation D4 Fire Alarms
E-28.03	Performs servicing and maintenance of integrated control systems.	D3 Automation D4 Fire Alarms