

## COURSE OUTLINE: ELR725 - PRINTS - LEVEL 2

Prepared: Chris Kelly

Approved: Corey Meunier, Chair, Technology and Skilled Trades

Course Code: Title ELR725: PRINTS - LEVEL 2 **Program Number: Name ELEC. APPRENTICES** Department: Semesters/Terms: 21F, 21W Course Description: This course introduces the student to electrical installation methods for commercial applications. The Canadian Electrical Code is covered in conjunction with interpretation of construction drawings and specifications for an industrial installation. **Total Credits:** 3 2 Hours/Week: **Total Hours:** 20 Prerequisites: There are no pre-requisites for this course. Corequisites: There are no co-requisites for this course. Course Evaluation: Passing Grade: 50%, D A minimum program GPA of 2.0 or higher where program specific standards exist is required for graduation. Other Course Evaluation & Grade Assessment Requirements: **Definition Grade Point Equivalent** A+ 90 - 100% 4.00 A 80 - 89% B 70 - 79% 3.00 C 60 - 69% 2.00 D 50 - 59% 1.00 F (Fail)49% and below 0.00 CR (Credit) Credit for diploma requirements has been awarded. S Satisfactory achievement in field /clinical placement or non-graded subject area. U Unsatisfactory achievement in field/clinical placement or non-graded subject area. X A temporary grade limited to situations with extenuating circumstances giving a student additional time to complete the requirements for a course. NR Grade not reported to Registrar's office. W Student has withdrawn from the course without academic penalty. **Books and Required** Canadian Electrical Code Resources: Publisher: CSA Group Edition: current

In response to public health requirements pertaining to the COVID19 pandemic, course delivery and assessment traditionally delivered in-class, may occur remotely either in whole or in part in the 2021-2022 academic year.

Electrical Wiring - Commercial 6CE by Mullin

Edition: current



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| Learning Objectives:  U or w to | Course Outcome 1  | Learning Objectives for Course Outcome 1   |
|---------------------------------|---|--|
|                                 | Upon successful completion of this course, the student will demonstrate the ability to: Interpret and revise specifications and drawings for a small commercial construction project. | Determine utility location and site features that affect electrical installations through the use of site drawings.  |
|                                 |   | Use architectural and structural drawings to determine methods of construction as they affect electrical installation.   |
|                                 |   | Use architectural and structural drawings to determine dimensions and elevations as they affect electrical installation.                                       |
|                                 |   | Use mechanical drawings to determine the electrical characteristics of mechanical equipment and systems.   |
|                                 |   | Use mechanical drawings to determine the layout of mechanical equipment and systems as they affect electrical installation.                                    |
|                                 |   | Select the correct wiring methods and electrical equipment for a commercial installation.  |
|                                 |   | Use a complete set of drawings and specifications to lay out commercial distribution and service equipment and wiring.   |
|                                 |   | Describe common lighting systems and their applications.   |
|                                 |   | Lay out commercial branch circuit wiring, lighting, and equipment using drawings and specifications.   |
|                                 |   | Use a complete set of drawings, specifications, manufacturers` drawings, ULC Standards, the National Building Code and the CEC to lay out a fire alarm system. |
|                                 |   | Lay out a control system or a communication system as per drawings and specifications.   |
|                                 |   | Use a complete set of drawings, specifications, manufacturers` drawings, and the CEC to prepare a material take off.   |
|                                 |   | Prepare sketches to solve and document construction problems and solutions.  |
|                                 |   | Prepare as-built drawings to document electrical construction.   |
|                                 |   | Read and develop basic single line, schematic, and wiring diagrams   |
| Evaluation Process and          | d Evaluation Type Evaluation Weight   |  |
| Grading System:                 | Tests (2) 100%  |  |
| Date:                           | July 30, 2021   |  |
| Addendum:                       | Please refer to the course outline addendum on the Learning Management System for further information.  |  |

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