



COURSE OUTLINE: CCT101 - RIG/HOIST/MAT HDLG

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Approved: Martha Irwin - Dean

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| Course Code: Title | CCT101: RIGGING/HOISTING/MATERIAL EQUIP HANDLING |
| Program Number: Name | 4098: CONSTRUCTION TECH. |
| Department: | CIVIL/CONSTRUCTION |
| Academic Year: | 2025-2026 |
| Course Description: | This course will provide the student with basic knowledge of modern, effective rigging, hoisting and material handling practices. The student will learn technical principles and concepts of load handling, as well as industry specific health & safety regulations that apply in the Province of Ontario. |
| Total Credits: | 4 |
| Hours/Week: | 4 |
| Total Hours: | 56 |
| Prerequisites: | There are no pre-requisites for this course. |
| Corequisites: | There are no co-requisites for this course. |
| Vocational Learning Outcomes (VLO's) addressed in this course: | 4098 - CONSTRUCTION TECH. VLO 2 Identify and adhere to established health and safety practices. VLO 3 Perform all construction tasks in compliance with applicable laws, regulations, codes and ethical practices in the construction field. VLO 5 Collaborate with a range of tradespersons and project stakeholders to maintain effective working relationships. VLO 8 Solve on-site trade-related construction problems using mathematical equations and geometric concepts. VLO 11 Assist skilled tradespersons and perform labouring tasks at construction sites. |
| Essential Employability Skills (EES) addressed in this course: | EES 4 Apply a systematic approach to solve problems. EES 5 Use a variety of thinking skills to anticipate and solve problems. EES 8 Show respect for the diverse opinions, values, belief systems, and contributions of others. EES 9 Interact with others in groups or teams that contribute to effective working relationships and the achievement of goals. EES 10 Manage the use of time and other resources to complete projects. EES 11 Take responsibility for ones own actions, decisions, and consequences. |
| 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 & Assessment Requirements:

Grade
 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 Resources:

Basic Rigger Lev 1 Trainee Guide by NCCER
 Publisher: Pearson Education Edition: 3rd Edition
 ISBN: 9780135185087

Course Outcomes and Learning Objectives:

| Course Outcome 1 | Learning Objectives for Course Outcome 1 |
|---|---|
| 1. The graduate has reliably demonstrated the ability to identify and adhere to established workplace health and safety practices. | 1.1 identify employee rights and responsibilities associated with health and safety practices 1.2 conduct self in safe manner and in accordance with the requirements of work situation 1.3 identify potential hazards in the workplace setting 1.4 participate in health and safety training 1.5 comply with all requirements of the current Ontario Health and Safety Act, 1990 1.6 adhere to and maintain all required health and safety training and certification such as First Aid, Workplace Hazardous Materials Information System (WHMIS), Working at Heights and Confined Space Safety training where appropriate 1.7 select and wear Personal Protective Equipment (PPE) |
| Course Outcome 2 | Learning Objectives for Course Outcome 2 |
| 2. The graduate has reliably demonstrated the ability to perform all construction tasks in compliance with applicable laws, regulations, codes and ethical practices in the construction field. | 2.1 read and interpret relevant codes and specification plans 2.2 identify how current legislation, codes and standards including the Ontario Building Code and its regulations govern construction projects 2.3 adhere to current legislation, standards, codes and bylaws that regulate the equipment and materials used in construction projects 2.4 identify and inspect rigging hardware such as shackles, chains, slings, lifting beams, clamps 2.5 Perform routine inspection of rigging and hoisting equipment for damage, wear, and compliance. 2.6 Prepare basic documentation related to lift planning for safe material movement. |



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| | Course Outcome 3 | Learning Objectives for Course Outcome 3 |
| | 3. The graduate has reliably demonstrated the ability to collaborate with a range of tradespersons and project stakeholders to maintain effective working relationships. | 3.1 take initiative and work independently with minimal supervision 3.2 work as an effective team player to complete tasks while promoting a positive work environment 3.3 apply effective organizational and time-management strategies in own work 3.4 take responsibility for one`s job related performance, as an individual and as a member of a multidisciplinary team 3.5 obtain assistance and clarification from the appropriate specialist to resolve problems 3.6 Demonstrate appropriate hand signals to guide hoisting and material handling operations. |
| | Course Outcome 4 | Learning Objectives for Course Outcome 4 |
| | 4. The graduate has reliably demonstrated the ability to solve on-site trade related construction problems using mathematical equations and geometric concepts. | 4.1 calculate scaffolding elevations 4.2 identify angles and slopes in erecting scaffolding 4.3 identify center of gravity for lifting operations 4.4 identify minimum and maximum cable angles for lifting and factors of safety 4.5 Solve on-site trade related construction problems using mathematical equations and geometric concepts 4.6 Estimate weight of materials using charts, formulas, and dimensional analysis. |
| | Course Outcome 5 | Learning Objectives for Course Outcome 5 |
| | 5. The graduate has reliably demonstrated the ability to assist skilled tradespersons and perform labouring tasks at construction sites. | 5.1 load and unload construction materials and move materials to work area 5.2 build and dismantle scaffolding and barricades 5.3 Tie and use basic rope knots for securing and moving materials |

Evaluation Process and Grading System:

| Evaluation Type | Evaluation Weight |
|------------------------|--------------------------|
| Practical Tests | 50% |
| Tests and Assignments | 50% |

Date:

July 31, 2025

Addendum:

Please refer to the course outline addendum on the Learning Management System for further information.

