

# CARPENTRY TECHNIQUES

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## Program Outline

<b>Major:</b>	CART
<b>Length:</b>	1 Year
<b>Delivery:</b>	2 Semesters
<b>Credential:</b>	Ontario College Certificate
<b>Effective:</b>	2012-2013
<b>Location:</b>	Barrie, Muskoka, Owen Sound
<b>Start:</b>	Fall (Barrie, Muskoka, Owen Sound)

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### Description

This program provides graduates with occupational skills for employment in the construction industry. Scope of the program includes surveying, formwork, framing, interior and exterior finish. In addition, students study theory and applications based on safe practice, building codes, and energy efficiency.

### Career Opportunities

Our graduates enjoy success as employees in residential, commercial and industrial construction, as well as the renovation field. Potential opportunities may include General Carpenter, Trim Carpenter or Form Work Carpenter.

A graduate may wish to discuss the possibility of eligibility for apprenticeship credits into the General Carpentry apprenticeship program with the Ministry of Training Colleges and Universities.

Research indicates that demand in Canada for individuals with these skills is currently high. If this trend continues it is expected that opportunities should abound.

### Program Learning Outcomes

The graduate has reliably demonstrated the ability to:

- identify, select and safely use tools to complete a given task to supplied specifications, codes and/or instructions;
- evaluate, select and apply the appropriate construction material and fastening systems for a specific use in the industry;
- utilize the standards set forth in the Ontario Building Code for all types of construction
- apply the basic principles of drafting in the interpretation and production of sketches, including survey and plot plans, architectural, mechanical, and electrical drawings;
- apply a variety of mathematical concepts and techniques to situations relative to the construction field;
- apply the principles of energy conservation to residential, commercial and industrial projects;
- recognize the interdependence among the trades on site, so that project completion is facilitated.

### **The Program Progression:**

Fall Intake - Barrie, Muskoka, Owen Sound

Sem 1 | Sem 2

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Fall | Winter  
2012 | 2013

### **Admission Requirements:**

Applicants must meet ONE of the following requirements to be eligible for admission to this program:

- OSS Curriculum: OSSD or equivalent with Grade 12 English (C) or (U) (ENG4C, ENG4U)
- Academic and Career Entrance Certificate (ACE) program with: Communications
- Ontario High School Equivalency Certificate (GED)
- Mature applicant with standing in the required courses and/or mature student testing that meets the minimum standards for admission

Applicants who are 19 years of age or over by the first day of classes, and who lack the academic entrance qualifications, may be considered for entrance to an appropriate post-secondary diploma or certificate program as mature applicants. Each applicant will be considered on an individual basis and acceptance will be determined by counselling, Communication Placement Assessment (CPA), previous post-secondary education and

evaluation of experience. Some programs also have specific prerequisite requirements that must be met prior to admission. Mature applicants must meet all program specific prerequisites. Those applying as mature students and having no documentation of Grade 12 education must supply, if required, proof of age, such as a copy of an official birth certificate or driver's licence. Refer to Section 2.5 and 2.6 of the Academic Calendar for further details.

**Graduation Requirements:**

- 9 Mandatory Courses
- 1 Communications Course
- 1 General Education Course

**Graduation Eligibility:**

To graduate from this program, the passing weighted average for promotion through each semester, and to graduate is 60%. Additionally, a student must attain a minimum of 50% or a letter grade of P (Pass) or S (Satisfactory) in each course in each semester unless otherwise stated on the course outline.

**Mandatory Courses**

- CART1000 Carpentry Fundamentals
- CART1001 Applied Carpentry Fundamentals
- CART1002 Advanced Framing
- CART1004 Trim Carpentry Theory
- CART1006 Drafting / CAD
- CART1007 Blueprint Reading
- CART1009 Formwork and Framing
- CART1010 Applied Carpentry Applications
- MATH1007 Mathematics Techniques

**Communications Course**

To be selected at time of registration from the College list, as determined by testing.

**General Education Course**

To be selected from College list

**Course Descriptions:**

**CART1000 Carpentry Fundamentals 84.0 Hours**

Students study applications and operations of standard safety procedures. This includes layout and building code applications for fanning, building materials, and energy efficient construction. Basic formwork, surveying equipment and techniques are examined.

**CART1001 Applied Carpentry Fundamentals 84.0 Hours**

This practical course involves the safe use of hand and stationary tools. Students participate in several site survey exercises. A framing project will also be completed.

**CART1002 Advanced Framing 42.0 Hours**

Students study wood frame construction. Trusses and renovation techniques are also explored. Safe and correct erection of scaffolds and ladders is demonstrated.

**CART1004 Trim Carpentry Theory 84.0 Hours**

This course is designed to familiarize students with interior and exterior finish. Materials, tools, and methods are analyzed.

**CART1006 Drafting / CAD 42.0 Hours**

Students interpret architectural drawings, and apply these skills through the use of software, to develop house plans that meet specifications of the building code.

**CART1007 Blueprint Reading 42.0 Hours**

Students read and interpret architectural drawings for residential and light commercial structures. Students demonstrate a comprehension of design and the building code through the completion of plan, elevation, and section views.

**CART1009 Formwork and Framing 84.0 Hours**

This practical course involves creation of a framed structure. Basic residential formwork projects are constructed.

**CART1010 Applied Carpentry Applications 168.0 Hours**

Students will construct complex roofs, stairs, hang doors, and perform many of the duties of a trim carpenter. In addition, exterior finish such as soffit, fascia, and siding are installed.

**MATH1007 Mathematics Techniques 42.0 Hours**

This is a consolidation and review of the principles and techniques of mathematics, which are required for the technical trades. Developing and promoting the use of mental arithmetic, estimation skills, problem solving, and reasoning skills.

**Course Description Legend**

P = Prerequisite; C = Concurrent prerequisite; CO= Corequisite

*Information contained in College documents respecting programs is correct at the time of publication. Academic content of programs and courses is revised on an ongoing basis to ensure relevance to changing educational objectives and employment market needs. The college reserves the right to add or delete programs, options, courses, timetables or campus locations subject to sufficient enrolment, and the availability of courses.*