

Apprenticeship, Workforce Development & Training Division Construction Project Management

Program Name	Construction Project Management Certificate Program
Program Length	1 Year Certificate Program
In Class Hours/Module	22 hours in class / Contact North Distance Learning
Out of Class Hours/Module	8 hours of lab related work per month for assignments
Start Dates	January 1, 2010 – December 15, 2010
Location	Kirkland Lake Campus

PROGRAM OBJECTIVES

Northern College, in partnership with Blackthorn Management Inc., developed this modular certificate program to cover the basic knowledge and skills required for a person to effectively manage construction firms and construction projects. The types of business models that will be discussed in the program include: design and engineering firms, cost consulting and project management firms, general contractors, design-builders, construction managers, sub-contractors, suppliers, and manufacturers.

The program is designed to assist those in medium or senior management positions in the industry, those aspiring to soon be in these positions within their firm, or individuals looking to begin their own businesses in the near future. The certificate program is designed to focus on the corporate side of the construction industry, as well as examine the key success factors of strong project construction management practices, which is key to the operational success of any firm doing business in this industry.

The certificate program has been divided into the following modules:

- ⊕ **Module 1** – Overview of the Construction Industry
- ⊕ **Module 2** – Marketing and Human Resource Management
- ⊕ **Module 3** – Contract & Insurance Management
- ⊕ **Module 4** – Financial & Accounting Management at Corporate and Project Level
- ⊕ **Module 5** – Health & Safety Management at Corporate and Project Level
- ⊕ **Module 6** – Managing Construction Operations and Scheduling
- ⊕ **Module 7** – Property Development from a Project Management Perspective

CAREER OPPORTUNITIES

The skills learned in this program will assist graduates in gaining better decision-making tools in undertaking medium and senior level management decisions within the construction industry. The positions that will most benefit from this certificate program include: project managers, site superintendents, general managers, vice presidents, presidents, principals, partners, associates, or owner-operators.

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CERTIFICATION

Successful graduates of this program will receive a Northern College Certificate. This program will also seek to help prepare students for certification requirements through the Project Management Institute and the Gold Seal Certification program through the Canadian Construction Association. The program has recently been accepted for accreditation by the **Gold Seal Accreditation Board** for a total of (25) twenty five SICs (Special Industry Courses). However, the course is currently awaiting a response from the Project Management Institute for the same.

ADMISSION REQUIREMENTS

High School Diploma or equivalency is required.

NOTE: Students must be able to receive instruction, respond and read in the English language.

COMPLETION REQUIREMENTS

Students must successfully complete every module through the assigned projects and presentations in order to receive their program certificate. (

METHOD OF TEACHING

Students living in the Greater Toronto Area will be able to attend each of the in class lecturers at Blackthorn's head office in Markham, Ontario. All students that enroll in the program from Northern Ontario will be able to access the in class lecturers through Contact North.

FEE SCHEDULE

The total tuition fee for the program is **\$5,250.00***, which includes GST. **Students will be registered for the full program, but invoiced as they register for each module in the amount of \$750.00.**

CLASS/CONTACT NORTH SCHEDULE

Classes start at 8:00am and finish at 1:00pm for both on-site and distance learning students. The College reserves the right to make changes to the dates for unforeseen circumstances and will advise students and instructors of changes at the earliest opportunity. (Please see the attached class schedule.)

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BACKGROUND INFO (Blackthorn Management Inc.)

Blackthorn was founded by Mike Da Silva Sr. in 1987 as a general construction firm, specializing in complex mechanical projects. In 1990, due to the management expertise of the firm, Ed Mirvish gave Mike Da Silva and Blackthorn the opportunity to project-manage the construction of the new `Royal Lounge` at the Royal Alexandra Theatre. The project included the underpinning and 25 foot excavation of the existing theatre to make way for a new basement lounge. The Royal Alexandra actually remained on stilts while construction commenced below, all of which was done while *Les Misérables* played in the theatre on the scheduled show nights. In all, the world renowned project came in on schedule and within the \$7,000,000 budget. This was Blackthorn's first major project management endeavour.

The work at the Royal Alexandra Theatre propelled Blackthorn Management into the field of project management where it has excelled in managing projects in both public and private sector for the last 17 years.

By the mid 2000s, Blackthorn's management team and advisory board made a decision to rebrand Blackthorn solely as an advisory firm, specializing in both project and program management services for public and private clients. Though Blackthorn still has a wealth of construction related experience in house, its main focus is to use this expertise and experience to provide clients with unparalleled support in managing their capital projects or operational programs.



Course Instructor Bio

Michael Da Silva Jr. BAS, MSc, PQS, PLE

Michael Da Silva Jr. brings a wealth of project and construction management expertise to the Blackthorn Management team and has been involved in all major projects at Blackthorn for the last 8 years.

Michael is well known in the construction industry for his innovative ICT adoption practices, and still remains a part-time **professor** at George Brown

College for the new Bachelor degree in Construction Science and Management.

Michael completed his Bachelor degree in Administrative Studies at York University and his Master of Science degree at the University of Bath in the United Kingdom where he studied **international construction management** as a discipline. Michael is also a **professional quantity surveyor**, a **professional land economist** and will soon be completing his **Project Management Professional** designation with PMI and his **LEED AP** through the Canadian Green Build Council. Michael has also been engaged in guest appearances at Ryerson University and in the Ontario General Contractors Association annual symposium.

CLASS SCHEDULE 2010

Module 1 – Overview of the Construction Industry

- Part 1 – Thursday, January 14, 2010 (5-Hour Session)
Thursday, January 21, 2010 (5-Hour Session)
- Part 2 - Thursday, February 18, 2010 (5-Hour Session)
Thursday, February 25, 2010 (5-Hour Session)

Module 2 – Marketing and Human Resource Management

- Part 3 – Thursday, March 4, 2010 (5-Hour Session)
Thursday, March 25, 2010 (5-Hour Session)
- Part 4 – Thursday, April 8, 2010 (5-Hour Session)
Thursday, April 15, 2010 (5-Hour Session)

Module 3 – Contract & Insurance Management

- Part 5 – Thursday, May 13, 2010 (5-Hour Session)
Thursday, May 20, 2010 (5-Hour Session)
- Part 6 – Thursday, June 3, 2010 (5-Hour Session)
Thursday, June 10, 2010 (5-Hour Session)

Module 4 – Financial & Accounting Management at Corporate and Project Level

- Part 7 – Thursday, July 8, 2010 (5-Hour Session)
Thursday, July 15, 2010 (5-Hour Session)
- Part 8 – Thursday, August 5, 2010 (5-Hour Session)
Thursday, August 12, 2010 (5-Hour Session)

Module 5 – Health & Safety Management at Corporate and Project Level

- Part 9 – Thursday, September 16, 2010 (5-Hour Session)
Thursday, September 23, 2010 (5-Hour Session)
- Part 10 – Thursday, October 14, 2010 (5-Hour Session)
Thursday, October 21, 2010 (5-Hour Session)

Module 6 – Managing Construction Operations & Scheduling

- Part 11 – Thursday, November 11, 2010 (5-Hour Session)
Thursday, November 18, 2010 (5-Hour Session)
- Part 12 – Thursday, December 2, 2010 (5-Hour Session)
Thursday, December 9, 2010 (5-Hour Session)

Module 7 – Property Development from a Project Management Perspective

- Part 13 – Thursday, April 22, 2010 (5-Hour Session)
Thursday, April 29, 2010 (5-Hour Session)
- Part 14 – Thursday, June 17, 2010 (5-Hour Session)
Thursday, June 24, 2010 (5-Hour Session)
- Part 15 – Thursday, November 25, 2010 (5-Hour Session)
Thursday, December 16, 2010 (5-Hour Session)

MODULE – General Objectives

Modules

Overview of the Construction Industry

The key learning objectives of this module will be to give students a much better understanding of the overall construction industry. An examination will be made into the residential, commercial, and institutional sectors. An examination will also be made into the many different players present in the industry, which include but are not limited to general contractors, sub-contractors, suppliers, manufacturers, architects, engineers, owners, building departments, political officials, unions, etc. Overall, this module is meant to be an introduction to the program and to the diverse skill sets that are required to undertake successful projects.

Notes: The class will be completed over two months. The expectation is that each module will include 8 hours of lab related work. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.

Marketing and Human Resource Management

Marketing and Human resource management are two disciplines that are commonly studied in business schools, but very rarely will any of these courses study the unique and challenging issues in the construction industry. This module is designed to help students determine the marketing strategy that best suits their construction industry client. A variety of strategies for a wide range of firms within the construction industry will be studied and the ultimate goal is for the student to create their own marketing plan, which must include an implementation strategy that is feasible. The second half of the class will cover the human resource management side of the construction firm. A study will be undertaken at the management level especially, and a review will be undertaken into the types of employment contracts that can be used, different HR strategies to motivate key employees, and retention strategies for key personnel.

Notes: The class will be completed over two months. The expectation is that each module will include 8 hours of lab related work. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.

Modules

Contract & Insurance Management

This module's aim is to give students a solid overview of the different contracts procurement methods that exist, and the standard Canadian Construction Association contracts that can currently be used. The different procurement methods that will be covered include: general contractor, design-builder, construction manager (agent), construction manager (risk), and public private partnerships. Some of the standard contracts to be covered include the CCDC2, CCA5, CCA1, CCA17, and CCDC3. In the second half of the course, the insurance and bonding aspects of the construction industry will be studied. In particular, attention will be given to the following: professional liability insurance, commercial liability insurance, WSIB, keyman life insurance, bonding surety, bid bonds, performance bonds, labour and material bonds, and builder's risk insurance. The outcome of the student is to have a much better understanding of the contracts and different insurances that exist in the marketplace today.

Notes: The class will be completed over two months. The expectation is that each module will include 8 hours of lab related work. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.

Financial & Accounting Management at Corporate and Project Level

The aim of this module is to give the student a better understanding of how to organize the financial and accounting aspects of their company and managed projects. An introduction into estimating, cost control, and accounting systems will be made. A variety of different corporate reports will be studied including: corporate financial statements, estimating, and job costing. At the project end, reports that will be studied include: schedule of values, change order management, costs to date, committed costs to date, and general requirements.

Notes: The class will be completed over two months. The expectation is that each module will include 8 hours of lab related work. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.

Health & Safety Management at the Corporate and Project Level

Health & Safety is the greatest risk effecting every employee and corporation in the construction industry today. As a result, it is critical for the student to get a better understanding of the due diligence requirements of the Ministry of Labour in managing the health and safety aspects of the company and project operations. Students will get a deeper understanding of senior management's role in implementing and monitoring a health & safety management plan. Students will also be given an overview of the requirements for all onsite operations. Past Ministry of Labour cases will be used as examples that the students can draw additional insight and understanding into the risks and importance of maintaining the best possible health and safety plan company wide.

Notes: The class will be completed over two months. The expectation is that each module will include 8 hours of lab related work.. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.

Modules

Managing Construction Operations and Scheduling

The key learning objectives of this module will be to give students a much better understanding of the challenges that exist in managing the corporate operations of the company, as well as the construction operations for the projects currently under contract. An examination will be undertaken from the corporate perspective in evaluating organizational charts, management policies and procedures, and different management techniques to manage the construction company. The second half of the course will study the organizational aspects of running projects successfully from the perspective of the consultant, general manager, project manager, site superintendent, sub-trades, and suppliers.

Notes: The class will be completed over two months. The expectation is that each module will include 8 hours of lab related work. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.

Property Development from a Project Management Perspective

Almost every person that works in the construction industry dreams of the opportunity to develop a property for themselves. The aim of this course is to examine the Project Management Institute's core knowledge areas in their guide, through the perspective of managing one's own property development. The development can be as small as a residential home and as large as a residential condominium or office tower. This course will give the student a flavor into the key aspects of a property development, but through the eye of a project manager.

Notes: The class will be completed over the course of the program. All assignments and projects outside the teaching sessions will be relevant to the student's current employment position.