

# Content outline

## Jobsite controls



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### Overview

The purpose of this course is to provide participants with the knowledge necessary to manage a construction site. Participants will learn how to layout a job site, manage documents, materials, tools, and equipment as well as coordinate labour and sub- contracts.

### Prerequisite

Although there is no formal educational prerequisite for this course, the participants' chances of success will be enhanced if their reading and comprehension skills are at a high school or equivalent level. Participants must be familiar with basic computer operating and word processing programs.

### Learning objectives

Upon successful completion of this course, participants will be able to:

- plan site layout
- manage materials
- manage equipment and tools
- maintain document control
- manage site labour and sub-contractors
- practice environmental controls
- identify concepts related to quality
- establish monitoring programs
- conduct project close-out

### Content

#### 1. Plan site layout.

- areas for material storage, site office, temporary services, and parking
- access routes
- existing services
- possible public safety, fire, and environmental considerations
- layout/lines/levels (boundaries)
- site security

#### 2. Manage materials.

- purchasing / ordering material
- sources for alternate materials
- receiving procedures



- storing materials
- inventory control systems
- safe material handling procedures
- scheduling material delivery
- review shop drawings, product data sheets, samples, mock-ups
- WHMIS
- minimizing material handling
- security of materials
- coordination of deliveries
- waste management

**3. Manage tools and equipment.**

- tools and equipment
- maintenance programs
- equipment lists
- suppliers
- scheduling equipment use
- rental inventory
- product data sheets
- rental / purchase agreements
- security of equipment
- loss control

**4. Maintain document control.**

- methods of controlling documents
- methods for document storage
- document retrieval methods
- change documents (site, design, time, etc.)
- shop drawings
- job site journal (consequences of not keeping current)
- digital imagery/pictures

**5. Manage site labour and sub-contractors.**

- trade overlaps
- union agreements
- good working environment / safety



- back-charges
- production management
  - o establish benchmark performance
  - o time logging process
  - o time management
- sub-contracts
- own forces

**6. Practice environmental controls.**

- laws and regulations (federal, provincial, and municipal)
- procedures to minimize waste (reduce, reuse, recycle)
- hazardous materials, dust, noise and air pollution

**7. Identify concepts related to quality.**

- quality control / quality assurance
- existing corporate national and international standards

**8. Establish monitoring programs.**

- quality / quantity control
- safety
- interrelationship of job progress, schedule, costs, and reporting
- changes / potential claims
- as built
- cost controls
- inspections
- sustainability (LEED®)

**9. Conduct project close-out.**

- deficiency list
- as built documents and manuals
- commissioning
- final inspections
- permits and certificates
- lessons learned

## Methodology

This course lends itself to short lectures, case studies, and practical projects. Instructors may involve the participants in the following specific techniques and activities:



- icebreaker type activity to get students engaged as soon as possible;
- completing a purchase order and matching it to a packing slip;
- visiting a job site;
- exercises on rent vs. purchase;
- completing a purchase order;
- given a specification, identifying:
  - o shop drawings, product data sheets, samples, mock-ups,
  - o applicable codes and standards,
  - o testing requirements,
  - o required tool list,
- resourcing a guest to speak on environmental / safety issues;
- analysing a safety program;
- analysing a quality assurance program;
- analysing a quality control program;
- working with drawings and specifications;
- establishing a benchmark performance (productivity).
- sustainability issues

## Assessment

In order to successfully complete this course, participants will be expected to demonstrate that they have achieved the learning objectives. They will be evaluated through various assignments, projects, and/or tests based on each of these objectives. Final assessment for the course will be determined by the following weighting:

Learning objective	Weight (%)
1. Plan site layout .....	20
2. Manage materials .....	.5
3. Manage tools and equipment .....	.5
4. Maintain document control .....	20
5. Manage site labour and sub-contractors.....	15
6. Practice environmental controls .....	10
7. Identify concepts related to quality .....	10
8. Establish monitoring programs.....	10
9. Conduct project close-out.....	.5
	100



## Resources

### Reports, manuals, textbooks and documents

A Guide to the Project Management Body of Knowledge (PMBOK), PMI Standards Committee, Project Management Institute, ISBN: 1-880410-12-5 (pbk. : alk. paper) / ISBN: 1-880410-13-3 (hdbk)]

Construction Site Management, William R. Mincks and Hal Johnston, Delmar, ISBN: 0-8273-7152-7 [abebooks.com](http://abebooks.com)

PMP Exam: Practice Test and Study Guide, ESI International, ISBN: 1-890367-11-7

PMP ©: Project Management Professional Study Guide, SYBEX Inc., IBN: 0-7821-4106-4

Tool and Material Control Systems, James E. Rowings and Mark O. Federle, National Electrical Contractors Association [necanet.org](http://necanet.org)

### Government/association websites

Canadian Construction Association [cca-acc.com](http://cca-acc.com)

Canadian Construction Document Committee [ccdc.org](http://ccdc.org)

Local construction associations

### Other resources

Applicable acts and regulations

Standard close-out documents such as OGCA – OAA (Ontario General Contractors Association – Ontario Association of Architects)

