



CIQS Syllabus		Original:	May 28, 1993
Course No:	A207	Rev. No:	4
Course Title:	Construction Technology III	Rev. Date:	March 31, 2012

### Course Description:

This course adds to the knowledge gained in Construction Technology I & II, covering Divisions 10, 11, 12, 13, 14, 21, 22, 23, 25, 26, 27 & 33 of MasterFormat 2010 along with additional studies concerning larger scale site servicing and municipal servicing including water supplies and sewers.

### Suggested Prerequisites:

Course No: A102 – Construction Technology I  
A201 – Construction Technology II

### Learning Outcomes:

The candidate will be able to:

1. Demonstrate the basic knowledge of the composition and possible use of the materials studied.
2. Demonstrate knowledge of the manufacturing process for the various types of materials.
3. Demonstrate knowledge of the appropriate processes given a defined circumstance.
4. Demonstrate knowledge of the conditions under which the various processes could be applied.

### Course Content:

The candidate will study from:

1. The text, Construction Materials, Methods & Techniques, Building for a Sustainable Future, 3<sup>rd</sup> Edition, the following:
  - a) Construction specialties including but not limited to chalk boards, toilet compartments, louvers and vents, access flooring, fireplaces, identifying devices, interior partitions, toilet and bath accessories, etc.
  - b) Equipment including built in maintenance equipment, athletic equipment, parking equipment, boat and dock equipment, residential equipment.
  - c) Furnishings including art work, cabinets and storage window treatment, fabrics, furniture, rugs and mats, seating, furnishing accessories.
  - d) Special construction including audio metric rooms, clean rooms, instrumentation, insulated rooms, integrated ceilings, nuclear reactors, metal building systems, special purpose rooms in buildings, radiation protection, sound vibration isolation, swimming pools, active solar energy systems, passive solar energy systems.
  - e) Conveying systems including dumbwaiters, passenger elevators, elevator safety devices, hydraulic passenger elevators, freight elevators, hoists and cranes, material handling systems, moving stairs and walks, building walks and ramps.
  - f) Mechanical systems including water distribution, water supply, piping, drainage systems, drain pipe and fittings, sewage disposal, fuel gas piping, plumbing fixtures, fire sprinkler systems, heating systems, air conditioning.
  - g) Electrical systems including power generation, services and service equipment, wiring materials and methods, junction boxes, outlets, switches, lighting, emergency lighting, fire and smoke detection.
2. The text, Estimating Construction Costs, 5<sup>th</sup> Edition, the following:
  - a) Chapter 22 – Sewage Systems.
  - b) Chapter 23 – Water Distribution Systems.



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**Required Textbooks and Materials:**

1. Construction Materials, Methods & Techniques, Building for a Sustainable Future, 3<sup>rd</sup> Edition by William P. Spence & Eva Kultermann.
2. Estimating Construction Costs, 5<sup>th</sup> Edition, by Robert L. Peurifoy and Garold D. Oberlender

**Testing:**

Emphasis in testing will be placed upon the candidate's knowledge of:

1. The manufacture of the types of materials,
2. The proper application of the process,
3. The appropriate use of the various materials.