

## Course Syllabus

### 020PLGGS5 – Planning & Management of Large Scale Projects

1. **Course number and name:** 020PLGGS5 – Planning & Management of Large Scale Projects
2. **Credits and contact hours:** 4 credits – 35 course hours
3. **Instructor's or course coordinator's name:** Charles MAROUN (coordinator) and Jean-Pierre ABI-KARAM (instructor)
4. **Textbook and other supplemental material:**
  - a. Primavera 6 Manual
5. **Specific course information**
  - a. **Catalog description:**

Objective: Introduce the student to project management and inform him on the content of contractual management documents, and furthermore to a methodology for the preparation of a complete set of tender documents.

Content: General presentation of the course - Administrative management - Quality management - Cost management - Time management – Presentation and discussion of student projects – What is a project – What is planning a project – How to develop a project – Running the schedule – Target and progress – Allocation of resources and cost – Layouts and filters
  - b. **Prerequisites:** None.
  - c. **Required/Elective/Selected Elective:** Required course for Buildings and Engineering Management students.
6. **Specific goals for the course**
  - a. **Specific outcomes of instruction:**
    - Demonstrate an understanding of the methods and practices available as well as the pre-established documents for the administrative and contractual management (FIDIC, AIA, etc ...)
    - Know about productivity and construction costs (RSMMeans, Le Moniteur, etc ...) and the methods of identification of creeks and critical paths.
    - Development of a construction project using Primavera software as a management tool (WBS, Activity Codes, Calendars, Tasks, Filters, Layouts, Resources, Cost, Manpower & Cost Histograms, Updating Schedules, Comparison to Target Schedules)
  - b. **KPIs addressed by the course:**

KPI	a2	c1	e1	h1
Covered	x	x	x	x
Assessed				
Give Feedback				

**7. Brief list of topics to be covered and approximate number of lectures:**

1. Management of Contracts and General and Particular Conditions of Contracts on the models pre-established by the International Federation of Consulting Engineers – FIDIC
2. Management of human and material resources, organization of work sites, operations and purchases.
3. Time management and methods for calculating progress, critical activities and identification of critical paths CPM and available software.
4. Cost management including budgeting and costing methods, preparation of specifications and quantities, and cost control.
5. Quality management including the introduction to the Specific and General Technical Specifications drawn up by the Technical Consulting Offices of the Specialized Consultants.
6. Risk management and practices and recommendations to limit the risks of claims and litigation.
7. Software Installation and Introduction (2 hours)
8. Selection of Project and WBS development (3 hours)
9. Activity Codes development and Calendars creation (2 hours)
10. Manpower, Quantities, and Cost Resources development (2 hours)
11. Task duration development based on productivity rates and quantities (2.5 hours)
12. Filters and Layouts creations (2 hours)
13. Cost and Manpower Histograms (1.5 hour)
14. Updating Schedule (1 hour)
15. Creation of Target Schedule and comparison to updated schedule (1.5 hours)