

Course Contents:

The course starts with an overview of project management discussing what is a project, who are the project stakeholders, the role of the project manager, the planning stages, and organizational structure. With this background and emphasis on construction projects, the course dives into introducing Construction project management, fundamentals of project planning and scheduling – Work breakdown structure (WBS), Network diagrams, Critical path method (CPM), Program evaluation and review technique (PERT), Precedence diagramming method (PDM), Earned Value Method (EVM) are discussed. Other aspects of project management such as cost management, resource management, quality management, and stakeholder management are also covered. Resource management on construction projects is discussed in detail (includes resource planning, resource allocation, resource levelling, and crashing of networks). Further, the importance of monitoring and control on construction projects is discussed including progress reporting requirements and methods for revising project plans. Lastly, construction contracts are reviewed through a project controls lens to learn how to perform delay analysis and identify construction claims.