Course Title: Project Management - Project Estimating and Cost Analysis

Course Description:
This course is based on Project Management norms as driven by acquired scope from new or existing clients and is intended to highlight a process of analyzing that scope and then initiating a cost analysis process to isolate a budget and expected revenue forecasts.

Course Objectives:
Standard: This is an industry proven methodology by some of the leading engineering firms in the world. The essential element is the familiarity with applying cost analysis to time and material type contracts.
Students at end of this class will be able to understand the cost make-ups of overheads, applied revenue models, outlined scheduling and contractual compliance.
- Project Scope analysis
- Scope administration towards organizational and resource chart
- Applying org chart towards resource allocations
- Applying resource allocations to time/schedule layout
- Outlining overhead cost layouts
- Applying cost layouts to applied resources and schedule
- Administering fees and profit margins
- Applying project overheads and costs
- Applying cost estimate and analysis to administering project plan
- Applying contractual elements
- Close out and tracking

Requirements
Student must exhibit a true understanding of the methodologies outlined and be able to carefully administer their own thought process in analyzing project schedules, milestones, resourcing and scope interpretation. Student must also exhibit an understanding of the fundamentals of math and spreadsheet usage.

Evaluation
There will be no administered test associated with this course. This course is intended to highlight methods and approaches to analyzing and estimating project scopes, budgets and revenue forecasts.

Materials
Laptop with Excel or some compatible product, i.e. Numbers for Mac. Pen, paper and any ancillary materials you feel necessary. There is no book.
Lesson Plan by day or session

Session 1
Greeting: Start off with a greeting of the day

Followed by:
- (15 Minutes) Introduction of course
- (15 Minutes) Instructor Background
- Course Timeline
  - (1 Hr) Phases of development
    - Business Development
    - Project Management
    - Engineering Support
  - (1 Hr) Scope Development and Contract Administration
  - (1 Hr) Administering Scope to Organizational Charts and Resource Plans

Session 2
Greeting: Start off with a greeting of the day

Followed by:
- (2 Hrs) Breakout of overhead costs
  - Applying Project overheads
  - Applying Margins
  - Affixing a multiplier
- (1 Hr) Applying resources to project schedule and timeline

Session 3
Greeting: Start off with a greeting of the day

Followed by:
- (1 Hr) Adjusting cost parameters to contract negotiations
- (1 Hr) Tracking schedule timelines and budget allocation
- (1 Hr) Delivering project and closeouts