

## Form 2: Senior Project Proposal Form

### Senior Design Project - Alternative 1 (In Combination with other Disciplines)

<b>Course #:</b>	CEE490
<b>Project Title:</b>	Measuring progress of construction projects using schedules and earned value techniques for erecting A Structure (Bridge, House, Building, roads, water supply network, sewer network, tunnel, water treatment plan, Solar Plants (in cooperation with EE Department))
<b>Advisor/Faculty Member</b>	Prof Ibrahim, Prof Zubair, Dr Basel, Dr Shabir,

#### Project Abstract and Description: (4-5 lines)

Any construction engineering projects, whether it is design or construction, requires Time and budget set out in the engineering contracts. Often, and due to the nature of construction industry; there are project completion delays and over costs leading to disputes between the project parties.

The students will choose an existing project where he has access to As-planned schedule as well as As-built Schedule to analyze and predict project progress. He could see the reasons behind project delays and overcosts by making interviews and visiting the project sites to get more insight. This capstone project will expose the students to project site different challenges of deficient engineering design, productivity of the contractor labor, relationship between different parties to gain more insight on the real application of what he learned at the CEE Department

#### Objectives (please list at least 3 objectives):

- 1 Realize the significant use of planning and scheduling tools for construction projects.
- 2 Familiar the student with use or lack of use of scheduling methods in construction projects.
- 3 Importance of Teamwork and communication across disciplines.

#### Special Requirements:

- 1 Student covers Planning and Scheduling course at CEE department.
- 2 Willing of the students to visit construction sites and communicate with project parties.

#### Project Requirements

Components	Tasks/Descriptions	Confirm (Y/N)
Classification of Design of an Engineering Product	System/Component/Process	

Use of Engineering Standards	Provide a list of standards (CPM, EV .....)	<b>Y</b>
Enough Realistic Constraints	Economic, safety, ethics, social impact, .... etc.	<b>Y</b>
Implementation Strategy	Case studies/lab experiments/other	<b>Y</b>
A physical Product or prototype will be built by the end of the project		<b>N</b>