B.Sc Civil Engineering

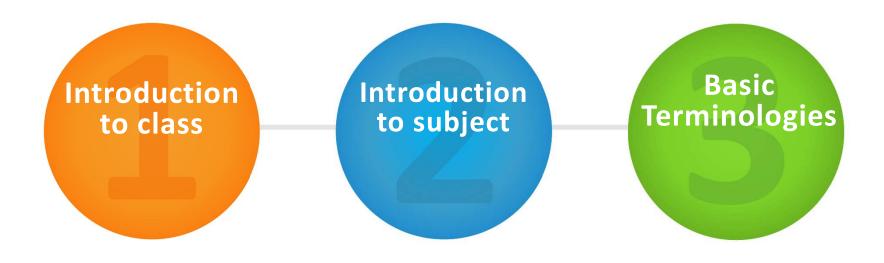


# Project & Contract Management CE 206

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Department of Civil Engineering
UET LAHORE

# **Design Class 1**





# Introduction to class & Teacher



# Introduction to Subject

#### Course Outline

**CE-206 PROJECT** AND CONTRACT **MANAGEMENT** Introduction to Engineering Economics: Inflation, escalation, indexation, economic evaluation, financial planning, value, utility, depreciation, arbitration and litigation. Demand and supply analysis, theory of pricing, of production and laws of theory return. **Construction Specifications.** Role of specifications on cost of project. **Contracts:** Types and conditions of contracts, work contracts and tendering. **Estimating:** Need for estimates, rough cost and detailed estimates. Preparation of bill of quantities. Scheduled and non scheduled rates. Analysis of rates, abstract of costs. Preparation of estimates from drawings. Use of Introduction critical path proper planning. to method. Safety and **Environmental** management at construction sites. Technical Report Writing: Qualities of a good report, main parts, scope and functions, Logical sequence, numbering system and use of suitable heading and subheadings, Formats of tile page, table of contents, bibliography, footnote.

**Oral Presentation:** Basic principles of good oral presentation.

#### **Related Books**

- Estimating and Costing by E.W. Steel and Terence J.
   Mc GHEE
- Estimating and Costing in Civil Engineering by S.
   Dutta 22<sup>nd</sup> edition.
- Estimating, Costing and Accounts by D.D.Kohli 9<sup>th</sup> edition.
- Fundamentals of construction, Estimating & Cost Accounting by Keith Collier 2<sup>nd</sup> edition.

#### Resources

• There are four Resources in Civil Engineering projects (4M)

- 1. Material
- 2. Man Power
- 3. Machinery
- 4. Money

#### Types of Projects

- Design Projects
- Construction Projects
- Supervision projects

"Project is a task component of resources which is required to be completed in certain budget and time schedule"

# **Parties of Project**

- Client/Employer/Owner
- Design Consultant
- Contractor
- Supervision Consultant

#### **Leading clients in Government sector**

- In Government sector leading clients are:
- WAPDA (Water and Power Development Authority)
- NHA (National Highway Authority)
- Pakistan Railways
- Irrigation and power department
- Communication and works department (C & W)

#### **Leading clients in Private sector**

- In private sector leading clients are:
- Bahria Developer
- Eden Developers
- Tricon developers (Real estate developers, Tricon village)
- Atlas Honda
- Coca Cola
- Suzuki
- Pepsi
- Nishat Mills
- KFC

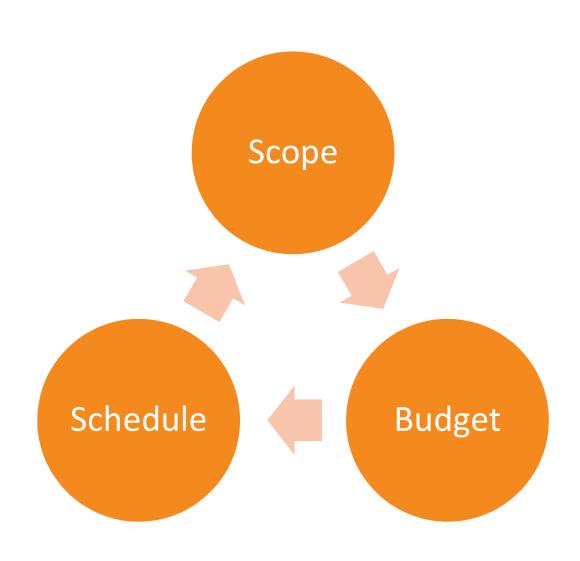
#### **Leading consultants**

- Leading consultants are:
- NESPAK
- ACE (Allied Consultant Engineering)
- AAA consultants
- REC (Republic Engineering Consultant)
- NDC (National Development Consultants)
- Noor Durrani Associates

#### **Leading contractors**

- Leading contractors are:
- Descon
- Izhar Group
- BanuMukhtar
- HabibRafique
- SKB Engineering
- FWO
- Habib Construction (N-League)
- Hasnain Group (FC College Underpass)

# Components of Project



Highways & Motorways



Multistory Buildings



 Canals & Hydraulic Structures



Dams & Barrages

Power Plant





• Steel structure

Oil refinery





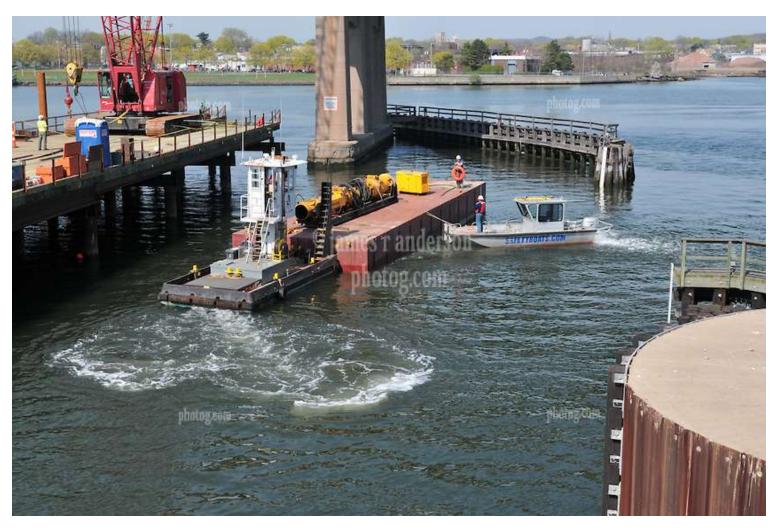
 Telecommunication tower

Transmission Lines

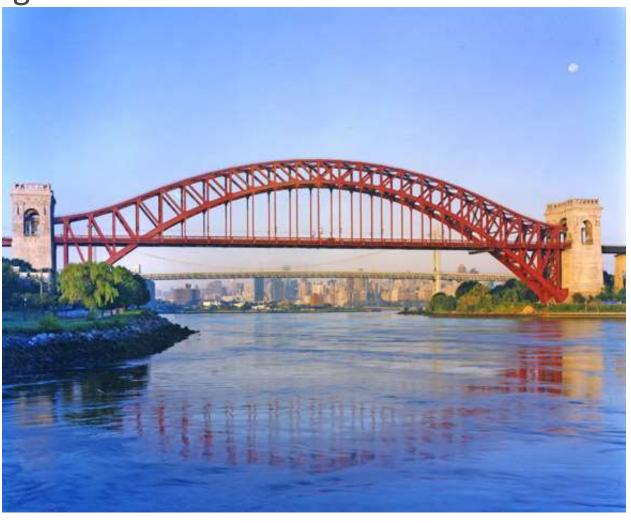




Harbor Construction



Bridge Construction



Railway constriction



#### Airports



#### Design class is more like activity class, you will require to:

Maintain a Design Register

 Prepare Presentations on different topics

Quantity Analysis

BOQ

# **Home Work**

Please Go through Internet for reading stuff regarding different Civil Engineering Projects