

The University of Jordan

Faculty of Engineering and Technology

Civil Engineering Department

0901522 – **contracts and specifications** ; 3 credit hours. Jamal Assbeihat – PhD.

Sunday; Tuesday; Thursday : 8 – 9

**Description:**

- Contract documents, procedure, phases, methods and conditions; specifications of construction works; Equipment cost analysis; units of quantities; Computation of areas and volumes; Take off procedure, Quantities of different finished works and materials; Bill of quantity and prices.

**References and sources**

- Jordan building law and regulations. MPWH, Jordan.
- The contract agreement Book: General and Special conditions; MPWH, Jordan
- FEDIC: Conditions of contract for works of civil engineering construction ( the red book)
- Jordan CODE; MPWH; Jordan
- Jemie Hinze; Construction Contracts; 2<sup>nd</sup> edition; McGraw-Gill
- Sandra Lee, William Trench & Andrew Willis: Willis's Elements of Quantity Surveying ( slected chapters); tenth edition; Blackwell.
- Daud S. Khalaf; Contracts, specification and quantity surveying ( in Arabic),( selected chapters).

**Objective:**

Making students able to estimate and take off quantities, write specifications, prepare contract documents, and introducing them to construction contracting system .

**Content:**

**PART ONE: CONSTRUCTION CONTRACTS**

- Introductions to construction process and contracts laws and regulations
- Bid Procedure:- Bid preparation, Bidding procedure, Contract award
- Construction contracts:- Contract elements, Contract types: competitive; negotiated; build – design; joint venture. Contract documents, General and special (supplementary) conditions, Subcontracts
- Contract administration:- Representatives on site, Progress reports, Changes and delays, Acceptance and final payments, Claims and disputes, Contract termination.

**PART TWO: SPECIFICATIONS**

- Introductions: building Code and specifications; Specification (quantitative) and Drawings (qualitative); the content (dimensions, quality, finish); international standard references.
- Types of specifications:- Performance and design; closed and open; all inclusive, reference, standard specifications.
- Specification problems for contractors.
- Classification of trades; specifications of trades.

#### Part three: Quantity Surveying

- Units of measurements; units of quantities
- Computation of areas;
- Computation of volumes
- Take off procedure, take off sheet,
- Quantities of different finished works
- Quantities of materials
- Bill of quantity; Bill of quantity and prices

#### **Participations:**

- There are some assignments or term papers to be completed and submitted either individually or as a team member.

- Collaboration among the students is encouraged, (i.e., copying and plagiarism will be severely penalized).

- Professional presentation, good organization, and proper documentation are very important components of the assignment grade.

- Student must attend class session and they are responsible for all materials and announcements discussed in the class. The university rules and regulations regarding the attendance will be strictly adhered to.

#### **Breakdown of the final grade:**

• Assignments& quizzes 20 %

• Mid Term Exam 30 %

• Final Exam 50 %

Total: 100 %