Module (Course Syllabus) Catalogue

2022-2023

College/ Institute	**Erbil Technology College**
Department	**Surveying**
Module Name	**Quantity Surveying**
Module Code	**QUS205**
Semester	**Second**
Credits	**5**
Module type	**Prerequisite** ☐ **Core** ■ **Assist.** ☐
Weekly hours	**3**	
Weekly hours (Theory)	**(3)hr Class**	**(123)hr Workload**
Weekly hours (Practical)	**( )hr Class**	**( )hr Workload**
Lecturer (Theory)	**Hemin Gaylany Ahmed**
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Lecturer (Practical)	**Hemin Gaylany Ahmed**
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Course Book

Course Description	Quantity surveying is a leading professional role in the built environment specialising in the cost management and procurement of construction projects. Quantity surveyors operate in all sectors of the construction industry around the world. ▪ With a vocational focus, this course equips you with excellent technical skills and relevant business awareness for this challenging career. You'll gain a detailed understanding of building production from concept to completion. The course covers all the key aspects of construction, commercial and domestic measurement, as well as project estimating and management. Visits to construction sites will enable you to apply practical skills to theory and add colour and relevance to your studies. ▪ Students can develop this area when they graduated in surveying department. Companies and organisations will ask for basics of the Quantity surveying. And they will understand these basics and apply practical.
Course objectives	1. To appreciate the place of quantitative assessment in every field of the construction industry. 2. To attain the highest possible accuracy in quantitative problem solving. 3. To be better understand the mode of site development and excavation. 4. To evaluate the material content of reinforced concrete structures.
Student's obligation	Quality control improvements in exam policies entail improvement in exam. There are only two theoretical exams. the first one is the midterm exam which weighs 14 marks and second is final weighs 40 marks
Required Learning Materials	The subject is taught based on theoretical lectures and applications.

Assessment scheme	10% Homework 2% Class Activity 16% (Report, Seminar, Paper, Essay, Project) 8% Quiz 24% Mid Term (Theory and practical) 40% Final
Specific learning outcome:	The lectures are three hours per week. • Two hours for theoretical lectures. • One hour tutorial lecture. The Quantity Surveyor is the financial consultant of the construction industry and his training and experience qualify him to advise on cost and contractual arrangements; and to prepare tender procurement and contract documents. He/she acts in conjunction with the Property Development Manager; Architect, Consulting Engineers, other professional consultants and Contractor to safeguard the Client's interest. His status is that of an independent professional financial consultant providing expertise in a specialised area of the construction industry.

Course References:	Quantity Surveying and Applications.
	▪ Useful references:
	  1- Quantity Survey by Mufak Naser Sahur.
	  2- Construction of Building by Zuher Sako.
	  3- Construction Work Specification by A national center construction Labs.
	  4- Iraq Technical Specification.

Course topics (Theory)	Week
Introduction.	**1st**
Measurement of Materials and works.	**2nd**
Method of taking out quantities.	**3rd**
Method of taking out quantities.(Example)	**4th**
Types of estimations.	**5th**
Estimation for small House until DPC.	**6th**

Estimation for small house above DPC.	**7th**
Detail and abstract Estimates of Building.	**8th,9th,10th**
Analysis of Rates.	**11th**
Open Channel	**12th**
Practical Topics	**Week**

Examinations:

1) Compositional: why question are predominantly seen in the explanatory question. This question type obliges students to read every part of the lectures precisely. Then student can understand the subject more intentionally. For example
   a) Find quantity of cement in bags need for 15m3 of masonry wall using mortar (1:3) if you now 0.34m3 mortar used for 1m3 masonry wall?
   b) Find sand quantity in concrete (1:2:4) for 30m3 work concrete?

Instead of gap question or multi-choice question I prefer to be direct question such as :
(What are the types of concrete blocks?)

2) solution questions such as :
   a) Mortar need for 15m3 masonry wall = 15*0.34 = 5.1m3
   b) Cement need in m3 = 1/4*5.1*1.33 = 1.7m3
   c) Cement in bags = 1.7*1440/50 = 49 bags
   d) Sand need in m3 = 2/7*30*1.52 = 13m3

 Extra notes:

 External Evaluator