Ministry of Higher Education and Scientific Research
Supervision and Scientific Evaluation Authority
Department of Quality Assurance and Academic Accreditation

Academic Program Description Form for Colleges and Institutes
Academic Year

University: Shatt Al-Arab
College/Institute: Engineering
Scientific Department: Civil
Date of Form Completion: 01/09/2024

Signature **Signature**
Name of Head of Department:

Asst. Lecturer Nabeel Najm Abdullah **Name of Scientific Assistant:** Dr. Jawad Kadhim

Reviewed by:
Quality Assurance and University Performance Division
Name of Division Director: Dr. Jasem Mohsen Yasser

Signature:

الدكتور
جاسم محسن ياسر
Dr.Jasim Al-Battat

أ.م.د.احسان قاسم محمد
عميد كلية الهندسة

Dean's Approval

TEMPLATE FOR COURSE SPECIFICATION

HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

COURSE SPECIFICATION

The model description provides a brief description of the main features of the course and the scientific outputs that the model student is expected to achieve if the student takes advantage of the learning opportunities available for the course. It should be compared with the description of the program.

1. Teaching Institution	Shatt Al-Arab University
2. University Department/Centre	Civil Engineering Department
3. Course title/code	**Engineering Economy\ CE326**
4. Modes of Attendance offered	Class attendance
5. Semester/Year	2nd semester / 3nd year
6. Number of hours tuition (total)	30 hrs.
7. Date of production/revision of this specification	2024
8. Aims of the Course	
Teaching undergraduate students how to deal with applied engineering programs such as the ETABS program used to analyze and design steel and concrete structures, as well as the Microsoft Project program used in planning construction projects, estimating costs and project completion time, and controlling projects.	

9· Learning Outcomes, Teaching, Learning and Assessment Method

A-Learning outcome

1- Teaching students how to deal with construction programs in an integrated manner and comparing with the theoretical study to design and analyze structural members and how to apply loads to structural buildings of various types. –

2- Teaching students how to create quantity schedules for construction projects by controlling the workflow

Teaching and Learning Methods

•Theoretical lectures, practical lectures, small discussion groups, presentation of scientific films, and writing reports.

Assessment methods

• Interacting within the lecture.
• Homework and reports.
• Short exams (quizzes).
• Semester and final exams.

C. Thinking Skills

C1- Attention: Arousing the students' attention by implementing one of the applied programs on the display screen in the hall.

C2- Response: Follow up the student's interaction with the material displayed on the screen.

C3- Attention: Follow up on the interest of the student who interacted more with the presented material, by increasing this interaction by requesting other programs and applications to display.

C4 - Forming the direction: meaning that the student is sympathetic to the presentation and may have an opinion about the direction of the presented topic and defend it.

C 5- Formation of value behavior: meaning that the student reaches the top of the emotional ladder, so that he has a stable level in the lesson and does not become lazy or fidgety.

Teaching and Learning Methods
• The usual theoretical presentation method using the writing board and depending on the style (how and why) of the subject and according to the curriculum of the subject. • The theoretical presentation method using the (data show) device and depending on the method (how and why) of the subject and according to the subject curriculum. • The method of laboratory display using special devices for measuring the different properties of the substance under experiment.
Assessment methods
• Direct questions in a manner (how and why) for the subject during the theoretical and practical lecture. • Sudden exams during the theoretical and practical lecture. • Quarterly exams for the theoretical and practical side.
• Final exams for the theoretical and practical side.
D. General and Transferable Skills (other skills relevant to employability and personal development) D1- Develop the student's ability to perform the duties and deliver them on time D2 - Logical and programmatic thinking to find programmatic solutions to various problems D3 - developing the student's ability to dialogue and debate D4 - Develop the student's ability to deal with modern technology, especially the Internet

10. Course Structure					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
1	2	How to choose a project	Project Selection Process	Th. Lecture	Written exam
2	2	How to choose a project	Project Selection Process	Th. Lecture	Written exam
3	2	Construction cost estimation method	Estimation of Construction Cost	Th. Lecture	Written exam
4	2	Construction cost estimation method	Estimation of Construction Cost	Th. Lecture	Written exam

5	2	Project cash flow method	Cash Flow of Project	Th. Lecture	Written exam
6	2	Project cash flow method	Cash Flow of Project	Th. Lecture	Written exam
7	2	Project evaluation method through earned value management	Project Evaluation by Earned Value management	Th. Lecture	Written exam
8	2	Project evaluation method through earned value management	Project Evaluation by Earned Value management	Th. Lecture	Written exam
9	2	How to reduce project duration through fault management	Reducing Project Duration by Crashing Management	Th. Lecture	Written exam
10	2	How to reduce project duration through fault management	Reducing Project Duration by Crashing Management	Th. Lecture	Written exam
11	2	Method of establishing construction contracts	The Basis of construction contracts	Th. Lecture	Written exam
12	2	Method of establishing construction contracts	The Basis of construction contracts	Th. Lecture	Written exam
13	2	Project risk management method	Project Risk Management	Th. Lecture	Written exam
14	2	Linear programming method (operations research)	Linear Programming (Operation Research)	Th. Lecture	Written exam
15	2	Linear programming method (operations research)	Linear Programming (Operation Research)	Th. Lecture	Written exam

11. Infrastructure	
1- Required reading: · Books · COURSE MATERIALS · OTHER	A Guide to the project management body of knowledge - PMI
2. Key references (sources)	1. Project Management, A Systems Approach to Planning, Scheduling, and Controlling, 10th edition, KERZNER 2. Principles of Construction management By: Roy Pitcher 3. Construction Planning, Programming and Control by Brian Cooke 4. Operations Management Creating Value Along the Supply Chain Russell - Chapter 9: Project management
A- Recommended books and references (scientific journals, reports ,....	Library locations in some international universities.
B- Electronic references, websites	Reputable websites. Libraries sites in some international universities.

12. Course development plan
Adding new subjects to the curricula within the development of the course by no more than 5%. Adding new references