Course Description Form

1. Course Name:
Design of Steel structure
2. Course Code:
WCV-41-04
3. Semester / Year:
First semester / 2024-2025
4. Description Preparation Date:
28/09/2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
2/3
7. Course administrator's name (mention all, if more than one name)
Name: Dr.Salam Razaq Jasim Email: salam.razaq@uowa.edu.iq
8. Course Objectives

Course Objectives	• Understanding Steel as a Construction Material • Design Principles and Methodologies • Structural Components Design • Analysis of Steel Structures
9. Teaching and Learning Strategies	
Strategy	The strategy for designing steel structures encompasses a systematic approach to ensure struct safety, efficiency, and cost-effectiveness, while adhering to codes and standards. Here' structured strategy for the design of steel structures: • Define Design Requirements and Scope • Preliminary Design and Conceptual Planning • Structural Analysis • Detailed Structural Design • Use of Design Codes and Standards • Optimization of Design

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Introduction Steel Structur	• Properties of structural steel (strength, ductility, weldability, etc.) • Advantages and disadvantages of using steel in construction • Types of structural steel and steel product	Thermotical	
2	3	Basics of Struct Analysis	Fundamental Principles of Structural Analysis Analysis Methods for Steel Structures		
3 4	3	Design Tension Members	Introduction to Tension Members		
5	3		Applications		
6		Mid exam			
7 8 9	3	Design of Compres Members (Columns)	Behavior of Compression Members Design of Steel Columns Applications		
10 11 12	3	Design of Beams	Flexural strength and shear strength		
13 14	3	Design of S Connections			
15	3	Final Exam			

11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Steel Design by Segui, Fourth Edition, 2007 Structural Steel Design by Mc Cormac and
Main references (sources)	
Recommended books and references (scientific journals, reports…)	Csernak, Fifth Edition, 2012. 3- AISC-LF Manual. Handbook and Specifications
Electronic References, Websites	