



CIHAN UNIVERSITY-SULAIMANIYA

Course Outline

2025-2026

**Address: Chwarchra-Opposite to Family Mall
Sulaymaniyah City
Kurdistan Region-Iraq
Tel: 07714695656,
email: presidency@sulicihan.edu.krd**

MODULE DESCRIPTION FORM

Module Information			
Module Title	Building Elements		
Module Type	Supported learning activity	<input type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar <input type="checkbox"/> Report <input type="checkbox"/> Extra activity	
Module Code	CUE42024		
Language	English		
ECTS Credits	6		
Module Level	2	Semester of Delivery	3 rd
Administering Department	Architecture	College	Engineering
Lecturer	Mr. Diyari Burhan Hussein		
Academic Title	Assistant Lecturer	Qualification	M.Sc.
Module Tutor	Mr. Diyari Burhan Hussein	e-mail	Diyari.burhan@sulicihaan.edu.krd
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date		Version Number	1.0
Cycle of Study	Bachelor	Form of Education	Full time

Relation with other Modules			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Cihan University Sulaimaniya?

College of Engineering

Department: Architecture

Discipline: Computer Skills

Stage: 1st



Total Contact Hours:	61
Total Self Study Hours:	101
Total No. Hours:	162
ECTS:	6

No. of Weeks	Contact Hours					Self-Study					
	Theoretical	Practical	Lab	Project	Visit	Quiz	Reading	Assignment	Report	Midterm Exam.	Final Exam.
1st Week (Registration)	2	2									
2nd Week	2	2					2			6	12
3rd Week	2	2				3	2				
4th Week	2	2					2	3			
5th Week	2	2				3	2				
6th Week	2	2					2	3			
7th Week	2	2					2		6		
8th Week	2	2					2				
9th Week	2	2				3	2			6	
10th Week	2	2		5			2	3	6		
11th Week	2	2				3	2				
12th Week	2	2					3	3			
13th Week	2	2				3	2				
14th Week	2	2					2		10		
15th Week (Final Exam.)											
16th Week (Final Exam.)											
TOTAL	28	28		5		15	28	12	22	12	12

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction <ul style="list-style-type: none"> • Introduction to Building Elements • Building Units • Building Components
Week 2	Building Classification <ul style="list-style-type: none"> • Design Method • Construction Method
Week 3	Equilibrium in Space <ul style="list-style-type: none"> • Vector product
Week 4	Equilibrium in Space <ul style="list-style-type: none"> • Moment of a force about a point
Week 5	Scalar product <ul style="list-style-type: none"> • Moment about an axis • Couples
Week 6	Equivalent systems of forces <ul style="list-style-type: none"> • Equilibrium in two dimensions
Week 7	Mid-Term Exam
Week 8	Equilibrium in two dimensions <ul style="list-style-type: none"> • Two and three-force bodies • Review
Week 9	Centroid of areas and lines <ul style="list-style-type: none"> • Centroids by integration • Distributed loads, Centroids of volumes
Week 10	Centroids of volumes <ul style="list-style-type: none"> • Trusses by method of joints • Trusses by method of sections
Week 11	Frames and machines <ul style="list-style-type: none"> • Laws of friction and applications • Review
Week 12	Parallel axis theorem and composite areas
Week 13	Moment of inertia of masses
Week 14	Three-dimensional bodies <ul style="list-style-type: none"> • Composite bodies
Week 15	Preparatory Week
Week 16	Final Exam

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	This course provides an introductory overview of the various elements used in construction. After receiving an introduction into fundamental principles of structural, physical, and long-term performance, students learn about element and product manufacturing techniques and how they relate to mechanical and non-mechanical properties of the various
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	<p>elements. Common construction methods are introduced, and building details are explored.</p> <p>Students have the opportunity to experience element capacity and behaviour as well as construction methods in demonstrations and lab experiments. Furthermore, element applications and detailing in structural and non-structural building components are explored. Resulting from this course, students will gain a comparative knowledge of element properties and possible applications in construction and architecture.</p>
Module Learning Outcomes	<p>Upon successful completion of the program, you should have the skills to:</p> <ol style="list-style-type: none"> 1- Knowledge of element properties (physical, structural,...) for the most common and advanced building elements, 2- Understanding of typical and potential applications of these elements, 3- Understanding of the relationship between element properties and structural form, 4- Ability to identify crucial problem areas in the manufacture and applications of building elements, 5- Understanding of the importance of experimental verification of element properties.

Learning and Teaching Strategies

Strategies	<p>The English language will be used in conducting the lectures for 4 hours/week. The data show, a whiteboard and a marker will be used for the father's explanation.</p> <p>For a better understanding of the application of building elements, a site visit will be done, and students are required to write a reflective report.</p>
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Module Evaluation

Assessment Types		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes		5%		
	Assignments		5%		
	Class Activity		6%		
	Attendance		4%		
Summative assessment	Midterm Exam	2hr	30%	7 th	
	Final Exam Theory	2hr	50%	15 th	
Total assessment			100% (100 Marks)		

Learning and Teaching Resources

	Text	Available in the Library?
Required Texts	Lecture notes given by the lecturer	
Recommended Texts	1. R.Barry, The construction of buildings, Volume one to five. 2. CONSTRUCTION TECHNOLOGY BOOK, Dr Atif Alsuhaury building construction.	
Websites		

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

Approved by Head of the Branch / Department

Signature	
Date	
Name	

Approved by Curriculum Development Committee and Bologna Process Committee

Signature

Date

Name