



**Jordan University of Science and Technology**  
**Faculty of Architecture And Design**  
**Architecture Department**

ARCH752 Building Technology - JNQF Level: 6
Second Semester 2023-2024

Course Catalog
3 Credit Hours. Functional and performance requirements of buildings, Factors affecting comfort to the occupant in the building, Elements of building, Construction details of building components, Services in building and Causes & prevention of difficulties in buildings. This course prepares students to apply technical knowledge and skills in building technology including design process, materials, systems, environmental performance and building economy
<b>Teaching Method:</b> On Campus

Text Book	
<b>Title</b>	BUILDING TECHNOLOGY
<b>Author(s)</b>	Stephen Emmitt
<b>Edition</b>	5th Edition
<b>Short Name</b>	1
<b>Other Information</b>	

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
2	New Architecture and Technology	Gyula Sebestyen	3rd Edition	

Instructor	
<b>Name</b>	Prof. Ahmed Freewan
<b>Office Location</b>	A3L3
<b>Office Hours</b>	Sun : 10:00 - 12:00 Mon : 15:00 - 16:00 Tue : 10:00 - 12:45 Wed : 10:00 - 13:00
<b>Email</b>	aafreewan@just.edu.jo

Class Schedule & Room
Section 1: Lecture Time: Mon : 08:30 - 11:30 Room: LAB

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	introduction	From 1, From 2
Week 2	building process	From 1
Weeks 3, 4, 5	building performances	From 1
Weeks 6, 7, 8, 9	building material, structure, loads	
Weeks 10, 11, 12, 13	environmental performance; heating, cooling, lighting ventilation	From 2
Weeks 14, 15	smart systems	
Week 16	exams and evaluation	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Acquire basic of building and construction industries, especially related to design, specifying, construction planning and management, and materials and services supply. [1B.B1, 1B.B2] [1L6K1, 1L6S1]	15%	final exam
Specify materials and their specification, methods required for each materials , and building/structural systems common to buildings [1B.B3, 1B.B4] [1L6C1, 1L6C2, 1L6C3]	20%	final exam
Evaluate building performance regarding energy, lighting, human and economy with respect to their ecological impact and their contribution to sustainable design. [1B.B6, 1B.B7] [1L6C3, 1L6C4, 1L6C5]	40%	final exam

Understand building smart systems including parametric design, CAD, BIM and AI in building the physical, mechanical, and environmental attributes of commercial and residential wood construction. [1B.B8, 1B.B9, 1B.B10][1L6C1, 1L6C2]	25%	final exam
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**Relationship to Program Student Outcomes (Out of 100%)**

A.A1	A.A2	A.A3	A.A4	A.A5	A.A6	A.A7	A.A8	B.B1	B.B2	B.B3	B.B4	B.B5	B.B6	B.B7	B.B8	B.B9	B.B10	C.C1	C.C2	C.C3	D.D1	D.D2	D.D3	D.D4	D.D5
								7.5	7.5	10	10		20	20	8.33	8.33	8.33								

**Relationship to NQF Outcomes (Out of 100%)**

L6K1	L6S1	L6C1	L6C2	L6C3	L6C4	L6C5
7.5	7.5	19.17	19.17	20	13.33	13.33

**Evaluation**

Assessment Tool	Weight
final exam	50%
semester works	50%

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