

Program Viewbook

Bachelor of Architecture (BArch)

Program Description

The Bachelor of Architecture is a five-year program that offers students a comprehensive education in architecture. It combines theoretical knowledge with practical skills and covers various subject areas such as architectural design, computation, history and theory, building technology, sustainability, and urban planning. The program aims to prepare students to create architecture that innovatively addresses contemporary challenges, including the climate crisis, the quest for social innovation in a globalized world, and the impact of new technologies on human lives. Dubai's unique cultural and environmental diversity supports the program to prepare architects for successful careers in various geographical contexts.

Graduates of the Architecture program will be equipped with the knowledge and professional competencies to pursue diverse career paths, including roles as Architects, Heritage Conservators, Landscape and Urban Designers, Construction and Project Managers, Real Estate Consultants, Educators, and Design Entrepreneurs.

Program Learning Outcomes (PLOs)

- PLO 1: Acquire interdisciplinary knowledge across general education areas, incorporating the breadth and diversity of the Canadian educational approach, as a foundation for architectural competencies within the UAE's cultural and environmental context.
- PLO 2: Comprehend the complex relationships between Man and the Environment and responding to the specific and the diverse needs of individuals and cultures to achieve sustainable healthy environments.
- PLO 3: Comprehend global and regional interior design, architectural, and art traditions, drawing on Canadian educational principles to integrate the UAE's historical and contemporary practices with design theories and human behavior.
- PLO 4: Comprehend the general concepts and strategies related to landscape, urban design, planning, and the broader environment within the UAE's context, focusing on creating sustainable settings that conserve resources, respect local traditions, and respond to the region's climate.
- PLO 5: Comprehend the basic principles of construction materials and methods, environmental systems and building services, building economics and the general framework of regulations and codes as involved in the creation of architecture.
- PLO 6: Comprehend the basic principles that govern the professional practice of architecture and the delivery of projects focusing on relationships within the architectural team, allied professions, and the public.
- PLO 7: Able to think critically and to apply research methods pertaining to the context of Architecture to investigate and evaluate human needs and their architectural and urban settings and to abstract patterns and derive conclusions.
- PLO 8: Create and refine architectural briefs out of general statements of needs, constraints, and resources.
- PLO 9: Develop creative, sustainable, and comprehensive designs for complex architectural problems taking into considerations the particularity of users, cultures, constraints,

resources and theories with the integration of structural, environmental and building systems considerations and life-safety provisions.

PLO 10: Assess and create the detailed elaborations of architectural components, building materials and assemblies focusing on construction, environmental systems and building envelopes and services.

PLO 11: Able to creatively use oral, manual and digital techniques to convey facts, arguments and points of reference concerning briefing, analysis and design formulations and their detailed documentation for purposes of review and construction.

PLO 12: Conduct research, abstract ideas and derive conclusions towards the synthesis of solutions to complex and particular design problems.

PLO 13: Perform professional and managerial tasks in architectural practice, individually and collaboratively, drawing on the Canadian emphasis on teamwork, inclusivity, and multidisciplinary collaboration with allied disciplines, consultants, clients, builders, and the public.

PLO 14: Recognize the emerging knowledge, skills and competencies required and to be able to plan and conduct a self-professional development program to comply with professional expectations.

Program Completion Requirements

The BArch degree shall be awarded to a student upon fulfillment of the following requirements:

- Successful completion of 170 credit hours.
- Achievement of a minimum cumulative GPA of 2.0 on a 4.0 scale.
- Completion of at least 50% of the total program credit hours at CUD.
- Completion of the Internship and Graduation Project while enrolled at CUD.

Program Structure

University Requirements Courses	33 Cr. Hrs.
Core Courses	41 Cr. Hrs.
Major Courses	96 Cr. Hrs.
Total	170 Cr. Hrs.

List of Courses

I. University Requirement Courses

Course Code	Course Title	Prerequisite/Co-requisite	Cr. Hrs.
Compulsory Courses			27
LNG 171	English I	None	3
LNG 172	English II	LNG 171	3
LNG 173	Professional Communication Skills	LNG 172	3
GED 190	Emirati Studies	None	3
GED 255	Critical Thinking and Problem Solving	LNG 172	3
MTH 112	Calculus I	None	3
SCI 220	Engineering Mechanics	None	3
ENT 141	Fundamentals of Innovation and Entrepreneurship 1	None	2
ENT 142	Fundamentals of Innovation and Entrepreneurship 2	ENT 141	1
ENT 241	Entrepreneurship 1	ENT 142	2
ENT 242	Entrepreneurship 2	ENT 241	1

Humanities Elective Courses (06 Credits): Students are required to select two courses from the following courses

GED 103	Head Anatomy Sculpture	None	3
GED 106	Smart Decisions: Data Literacy and Visualization	None	3
GED 110	Modern Art Appreciation	None	3
GED 111	Music Appreciation and Communication	None	3
GED 112	Using Positive Psychology at Work	LNG 172	
GED 191	Islamic Studies	None	3
GED 196	Communication Skills in Arabic 1	None	3
GED 205	Psychology in Everyday Life	LNG 172	3
GED 272	Fundamentals of Public Speaking	LNG 172	3
GED 324	Ethical Reasoning for Today's World	LNG 172	3

II. Core Courses

Course Code	Course Title	Prerequisite/Co-requisite	Cr. Hrs.
Compulsory Courses			41
DES 101	Studio 1 - Introduction to Design	<u>Co-DES 110 & DES 113</u>	4
DES 102	Studio 2 - Design and The Human	DES 101, DES 110, DES 113 <u>Co-DES 120 & DES 123</u>	4
DES 110	Design Theory	<u>Co-DES 101 & DES 113</u>	
DES 113	Drafting & Modeling	<u>Co-DES 101 & DES 110</u>	3
DES 120	Human Factors	<u>Co-DES 102 & DES 123</u>	3
DES 123	Freehand Drawing & Rendering	<u>Co-DES 102 & DES 120</u>	3
DES 213	History of Architecture and Interior Design 1	LNG 171, DES 110	3
DES 214	Computer-Aided Design	DES 113	3
DES 223	History of Architecture and Interior Design 2	DES 213	3
DES 361	Working Drawings and Detailing	ARC 244/IND 211, ARC 301/IND 301	3
DES 381	Artificial Intelligence for Design Applications	DES 214	3
DES 382	Data Analytics in the Built Environment	MTH 112 or MTH 196, DES 214	3
DES 400	Internship	120 Cr. Hrs. & CGPA ≥ 2	3

III. Major Courses

Course Code	Course Title	Prerequisite/Co-requisite	Cr. Hrs.
Compulsory Courses			87
ARC 201	Studio 3 - Architectural Design & Materiality	DES 102, DES 120, DES 123	6
ARC 202	Studio 4 - Design and Context	ARC 201	6
ARC 232	Site Planning & Landscape	None	3
ARC 243	Construction and Design Integration 1	DES 102	3
ARC 244	Construction and Design Integration 2	ARC 243	3
ARC 301	Studio 5 - Design and The Environment	DES 223, ARC 202	6
ARC 302	Studio 6 - Home and The City	ARC 301, ARC 311, ARC 312	6
ARC 311	Building Information Modelling	DES 214	3
ARC 312	Structures for Architecture	MTH 112, SCI 220, ARC 244	3
ARC 322	Research & Design Applications	LNG 173-1, ARC 202	3
ARC 341	Environmental Systems & Design Integration	ARC 202, ARC 232	3
ARC 401	Studio 7 - Urban Design	ARC 302, ARC 322 & <u>Co-ARC 434</u>	6
ARC 402	Studio 8 - Integrated Design 1	ARC 311, ARC 401	6
ARC 434	Planning and Urban Design	ARC 302	3
ARC 435	Vernacular Architecture and Conservation	DES 223	3
ARC 440	Building Code for Architecture	DES 361, ARC 302	3
ARC 450	Professional Practice & Project Management for ARCH	ARC 302	3
ARC 501	Studio 9 - Integrated Design 2	ARC 402	6
ARC 502	Studio 10 - Senior Project	DES 400, ARC 435, ARC 510, ARC 511	6
ARC 510	Research and Design Explorations	ARC 322, ARC 440	3
ARC 511	Construction Economics	ARC 322, ARC 440	3
Elective Courses (09 Credits): Students are required to select three courses from the following courses			
IND 341	Furniture Design and Detailing	DES 120, DES 223	3
ARC 410	Urban Studies Seminar	ARC 434	3
ARC 420	Revitalizing Public Spaces via Small-scale Installations	ARC 302 or IND 302	3
DES 410	Architecture of The Islamic World	DES 223	3
DES 420	Landscape Architecture	ARC 232 or IND 220	3
DES 430	Graphic Design & Portfolio for ARCH and ID	DES 214	3
DES 440	Visualization	DES 214	3
DES 450	Complex Design Studio	ARC 302 or IND 302	3
DES 460	Digitization and Robotics in Building Construction	ARC 302 or IND 302	3
DES 470	Professional Practice Seminar	ARC 302 or IND 302	3

Ten Semesters Study Plan

Semester	Course Code		Course Title	Prerequisite/ <u>Co-requisite</u>	Cr. Hrs.
1	LNG	171	English I	None	3
	DES	101	Studio 1 - Introduction to Design	<u>Co-DES 110 & DES 113</u>	4
	DES	110	Design Theory	<u>Co-DES 101 & DES 113</u>	3
	DES	113	Drafting & Modelling	<u>Co-DES 101 & DES 110</u>	3
	ENT	141	Fundamentals of Innovation and Entrepreneurship 1	None	2
	MTH	112	Calculus I	None	3
	Total				18
2	LNG	172	English II	LNG 171	3
	DES	102	Studio 2 - Design and The Human	DES 101, DES 110, DES 113 <u>Co-DES 120 & DES 123</u>	4
	DES	120	Human Factors	<u>Co-DES 102 & DES 123</u>	3
	DES	123	Freehand Drawing & Rendering	<u>Co-DES 102 & DES 120</u>	3
	ENT	142	Fundamentals of Innovation, and Entrepreneurship 2	ENT 141	1
	SCI	220	Engineering Mechanics	None	3
Total					17
3	ARC	201	Studio 3 – Architectural Design & Materiality	DES 102, DES 120, DES 123	6
	ARC	243	Construction and Design Integration 1	DES 102	3
	DES	213	History of Architecture and Interior Design 1	LNG 171, DES 110	3
	DES	214	Computer-Aided Design	DES 113	3
	ENT	241	Entrepreneurship 1	ENT 142	2
Total					17
4	ARC	202	Studio 4 - Design and Context	ARC 201	6
	ARC	232	Site Planning & Landscape	None	3
	ARC	244	Construction and Design Integration 2	ARC 243	3
	DES	223	History of Architecture and Interior Design 2	DES 213	3
	LNG	173	Professional Communication Skills	LNG 172	3
	ENT	242	Entrepreneurship 2	ENT 241	1
Total					19
5	ARC	301	Studio 5 - Design and The Environment	DES 223, ARC 202	6
	ARC	311	Building Information Modelling	DES 214	3
	ARC	312	Structures for Architecture	MTH 112, SCI 220, ARC 244	3
	ARC	341	Environmental Systems & Design Integration	ARC 202, ARC 232	3
	DES	381	Artificial Intelligence for Design Applications	DES 214	3
Total					18
6	ARC	302	Studio 6 - Home and The City	ARC 301, ARC 311, ARC 312	6
	ARC	322	Research & Design Applications	LNG 173, ARC 202	3
	DES	361	Working Drawings and Detailing	ARC 244/IND 211, ARC 301/IND 301	3
	DES	382	Data Analytics in the Built Environment	MTH 112/MTH 196, DES 214	3
	XXX	XXX	Program Major Elective (1)		3
	Total				18
7	ARC	401	Studio 7 - Urban Design	ARC 302, ARC 322 & <u>Co-ARC 434</u>	6
	ARC	434	Planning & Urban Design	ARC 302	3
	ARC	435	Vernacular Architecture and Conservation	DES 223	3
	GED	190	Emirati Studies	None	3
	Total				15
8	ARC	402	Studio 8 - Integrated Design 1	ARC 311, ARC 401	6

Semester	Course Code		Course Title	Prerequisite/Co-requisite	Cr. Hrs.
9	ARC	440	Building Code for Architecture	DES 361, ARC 302	3
	ARC	450	Professional Practice & Project Management for ARCH	ARC 302	3
	XXX	XXX	Program Major Elective (2)		3
	Total				15
10	ARC	501	Studio 9 - Integrated Design 2	ARC 402	6
	ARC	510	Research and Design Explorations	ARC 322, ARC 440	3
	ARC	511	Construction Economics	ARC 322, ARC 440	3
	GED	XXX	GE Elective (1)		3
	Total				15
	ARC	502	Studio 10 - Senior Project	DES 400, ARC 435, ARC 510, ARC 511	6
	GED	255	Critical Thinking and Problem Solving	LNG 172	3
	GED	XXX	GE Elective (2)		3
	XXX	XXX	Program Major Elective (3)		3
Total					15
	DES	400	Internship	120 Cr. Hrs. & CGPA \geq 2	3
Total Credit Hours					170