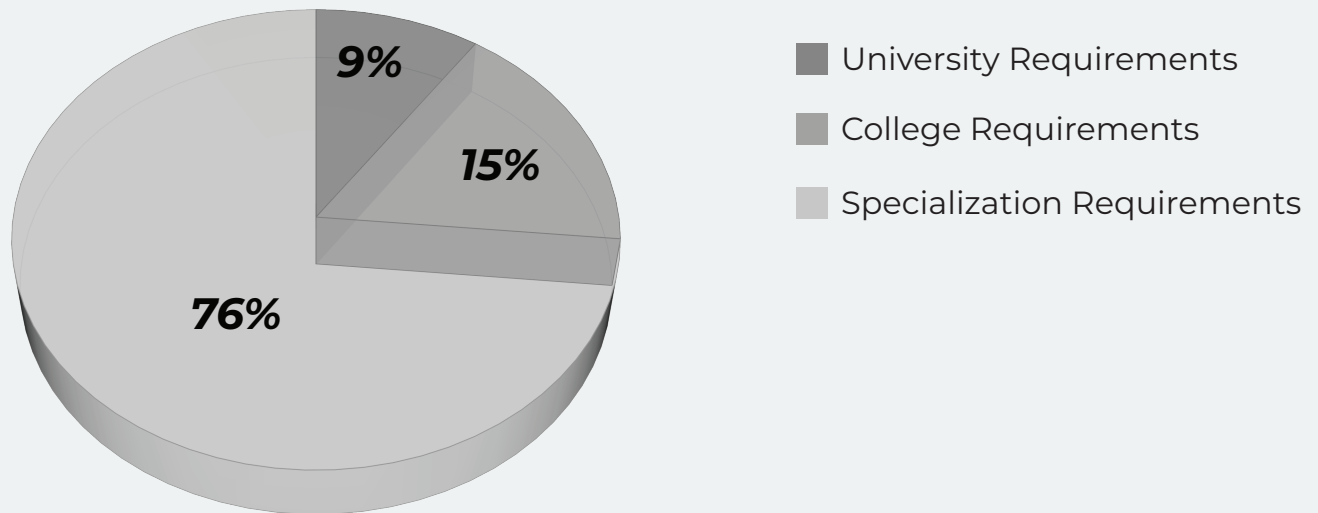


HOUSING ARCHITECTURE & URBAN DEVELOPMENT (HOUD)

Ain Shams University – Faculty of Engineering, Cairo, EgyptMuseum Environments:



Housing Architecture and Urban Housing program Mission and Goals

Program Mission

Qualifying graduates with all necessary competences to understand the housing market and real estate development; graduates will gain knowledge in housing typology, provision, policies, finance, legislation, and management. It qualifies graduates to use digital technologies and software as design aiding tools to generate and analyses spatial data, produce integrated architecture documents, and land mapping. The HOUD emphasizes the integration of social, economic, environmental, along with physical aspects to create safe, inclusive, healthy, and sustainable cities. It introduces graduates to contemporary trends and practices in housing industry and urban development schemes such as smart housing/cities.

Graduates of the HOUD program can handle with different jobs in related fields to the housing and urban development sector ranging from architecture level to the urban design and planning level.

Program Goals

The main goal of the programme is to prepare architects and urban planners specialised in Housing Architecture and Urban Development approaches. Graduates are capable of developing advanced creative thinking to design architecture projects, multi-functional complexes, and innovative problem-solving skills to develop processes for housing development, renewal refurbishment and the regeneration place and place making. They are capable of relating to multidisciplinary housing subjects and to critically analyze and evaluate existing context of the built environment and construction constrains, in relation to social cultural needs and economic market and policy frameworks. The programme introduces students to sciences, theories, methodologies, techniques, and tools relating to the architectural engineering and urban design, as well as develop necessary skills to understand market needs and social and cultural context related to housing and urban. Graduate will be able to deal with modern techniques and tools for learning and linking theory and practice.

HOUSING ARCHITECTURE & URBAN DEVELOPMENT (HOUD)

Ain Shams University – Faculty of Engineering, Cairo, EgyptMuseum Environments:

University Requirements for Housing Architecture and Urban Development Program

Course Code	Course Title	Credit Hours
ASU011	Technical English Language	0
ASU111	Human Rights	2
ASU112	Report Writing and Communication skills	3
ASU113	Professional Ethics and Legislations	3
ASU114	Selected Topics in Contemporary Issues	2
-	ASU Elective (1)	2
-	ASU Elective (2)	2
Total Credit Hours		14
Pool of ASU Elective (1) Courses		
ASU321	Innovation and Entrepreneurship	2
ASU322	Language Course – can accept equivalent certificates	2
ASU323	Introduction to Accounting	2
ASU324	History of Engineering and Technology	2
Pool of ASU Elective (2) Courses		
ASU331	Human Resources Management	2
ASU332	History of Architecture	2
ASU333	Introduction to Marketing	2
ASU334	Building Safety and Fire Protection	2
ASU335	Literature and Arts	2
ASU336	Business Administration	2



HOUSING ARCHITECTURE & URBAN DEVELOPMENT (HOUD)

Ain Shams University – Faculty of Engineering, Cairo, EgyptMuseum Environments:

College Requirements for Housing Architecture and Urban Development Program

Course Code	Course Title	Credit Hours
PHM011	Basic Mathematics	0
ENG111	Field Training	0
PHM012	Mathematics (1)	3
PHM013	Mathematics (2)	3
PHM021	Vibration and Waves	3
PHM022	Electricity and Magnetism	3
PHM031	Statics	3
PHM032	Dynamics	3
PHM041	Engineering Chemistry	3
PHM111	Probability and Statistics	2
MDP081	Production Engineering	3
MDP011	Engineering Drawing	3
CEP011	Projection and Engineering Graphics	3
CSE031	Computing in Engineering	2
ENG011	Fundamentals of Engineering	2
-	Structures and Properties of Materials Elective	2
-	Engineering Economy Elective	2
-	Project Management Elective	2
Total Credit Hours		42
Pool of Structures and Properties of Materials Elective Courses		
MDP151	Structures and Properties of Materials	2
EPM211	Properties of Electrical Materials	2
CES151	Structures and Properties of Construction Materials	2
Pool of Engineering Economy Elective Courses		
MDP231	Engineering Economy	2
ARC471	Feasibility Studies	2
ARC463	Renewable Energy Systems and Economics	2
UPL271	Society and Housing Economics	2
UPL471	Urban Economics	2
EPM119	Engineering Economy and Investments	2
CEI261	Engineering Economics and Management	2
CES171	Engineering Economics and Finance	2
Pool of Project Management Elective Courses		
MDP232	Industrial Project Management	2
ARC371	Architecture Project Management	2
EPM411	Project Management for Electrical Engineering	2
CSE441	Software Project Management	2
CES271	Project Management Essentials in Construction	2

HOUSING ARCHITECTURE & URBAN DEVELOPMENT (HOUD)

Ain Shams University – Faculty of Engineering, Cairo, EgyptMuseum Environments:

General Specialization Courses for Housing Architecture and Urban Development Program

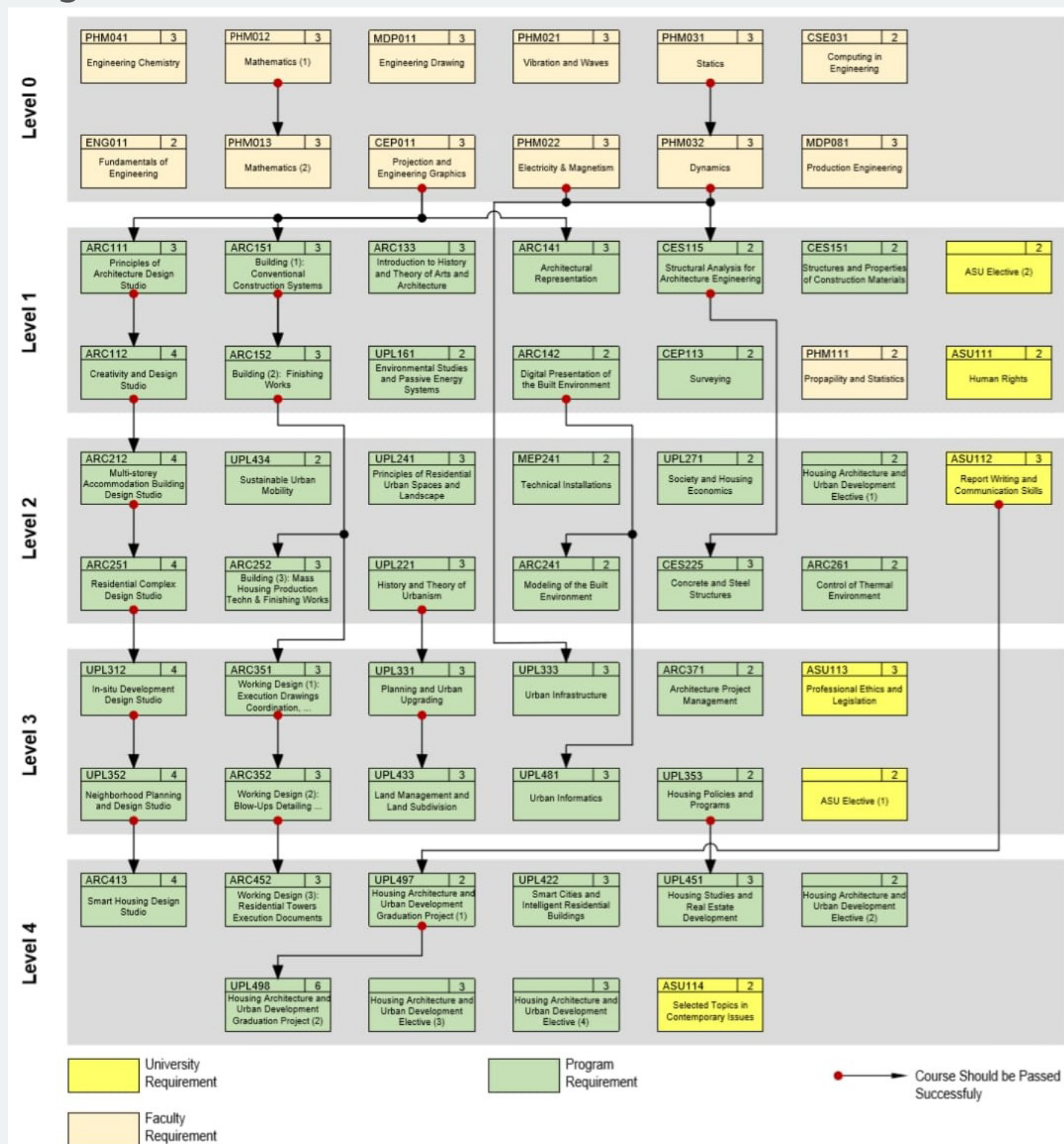
Level	Year	Code	Module title	credit	Core/ Pathway Related
		ASU			
Sophomore					
3	1	ARC111	Principles of Architecture Design Studio	3	Core
3	1	ARC141	Architectural Representation	3	Core
3	1	ARC133	Introduction to History and Theory of Arts and Architecture	3	Core
3	1	UPL161	Environmental Studies and Passive Energy Systems	2	Core
3	1	CES151	Structures and Properties of Construction Materials	2	Core
3	1	CES151	Structural Analysis for Architectural Engineering	2	Core
3	1	ARC 142	Digital Presentation of the Built Environment	2	Core
3	1	ASU335	Elective 2- ASU Literature & Art	2	Elective
3	1	ARC152	Building (2): Finishing Works	3	Core
3	1	ARC112	Creativity Design Studio	4	Core
3	1	PHM111	Probability and Statistics	2	Core
3	1	ASU111	Human rights	2	Core



HOUSING ARCHITECTURE & URBAN DEVELOPMENT (HOUD)

Ain Shams University – Faculty of Engineering, Cairo, Egypt Museum Environments:

Course Tree for Housing Architecture and Urban Development Program



HOUSING ARCHITECTURE & URBAN DEVELOPMENT (HOUD)

Ain Shams University – Faculty of Engineering, Cairo, EgyptMuseum Environments:

General Specialization Courses for Housing Architecture and Urban Development Program

Level	Year	Code ASU	Module title	credit	Core/ Pathway Related
Junior					
4	2	ARC261	Multi Story Accommodation Building Studio	4	Core
4	2	MEP241	Technical Installations	2	Core
4	2	UPL251	Residential Complex Design Studio	4	Core
4	2	UPL221	History & Theory of Urbanism)	3	Core
4	2	UPL212	Principles of residential Spaces and Landscape	3	Core
4	2	UPL271	Society and Housing Economics	2	Core
4	2	ARC252	Building (3): Mass Housing Production Techniques	3	Core
4	2	CEP113	Surveying	2	Core
4	2	UPLxxx	Elective Housing (I)	-	Elective
4	2	UPL381	Introduction to GIS	2	Core
4	2	ASU112	Report writing and communication skills	3	Core
4	2	ARC371	Architecture Project Management	2	Core
Senior 1					
5	3	UPL312	In-situ Development Design studio	4	Core
5	3	UPL331	Planning and urban upgrading	3	Core
5	3	UPL353	Housing policies and program	2	Core
5	3	UPL352	Neighbourhood planning and design studio	4	Core
5	3	UPL434	Sustainable Urban Mobility	2	Core
5	3	ARC351	Working Design (1): Execution Drawings Coordination, Annotation and Coding	3	Core
5	3	ARC352	Working Design (2): Blow-Ups Detailing, Items Specifications and BOQs	3	Core
5	3	UPL241	Modelling of built environment	2	Core
5	3	UPL481	Urban Informatics	3	Core
5	3	ASU113	Professional Ethics and legislation	3	Core
5	3	ASUxxx	Elective (I)	2	Elective
Senior 2					
6	4	ARC413	Smart Housing Design Studio	4	Core
6	4	UPL433	Land Management and Land subdivision	3	Core
6	4	UPL451	Housing Studies and Real estate Development	3	Core
6	4	ARC452	Working Design (3) Residential Towers- Execution Docs	3	Core
6	4	UPL422	Smart Cities and Intelligent Residential Building	3	Core
6	4	-	Housing and Urban Development Elective 3	3	Elective
6	4	UPL497	Housing & Urban Graduation Project (1)	2	Core
6	4	UPL498	Housing & Urban Development Graduation (2)	6	Core
6	4	UPL372	Equity and Urban Justice	2	Core
6	4	ASU114	Selected Topics in contemporary Issues	2	Core
Total Credit Hours				122	