FINAL INTERNATIONAL UNIVERSITY

INSTITUTE OF GRADUATE STUDIES

ARCHITECTURE MASTER WITH THESIS Program of Courses

Course categories: AC = Area Core; IC = Institute Core; FC = Faculty Core; AE = Area Elective; FE = Faculty Elective.

Semester	Course Code	Course Title	Course Category	Hours			Total Credit	Pre-requisite	ECTS Credit
				Lecture	Tutorial	Lab/Prac.			
1	BASC501	RESEARCH METHODS FOR BASIC SCIENCES	IC	3	0	0	3	-	8
1	ARCH501	INTRODUCTORY WORKSHOP	AC	3	0	2	4	-	8
1	ARCH5X1	AREA ELECTIVE	AE	X	X	X	3	-	7
1	ARCH5X2	AREA ELECTIVE	AE	X	X	X	3	-	7
		Total 4 courses	**TOTAL:**	**6**	**0**	**2**	**13**		**30**
2	ARCH502	SUSTAINABLE DEVELOPMENTS	AC	3	0	0	3	-	8
2	ARCH5X3	AREA ELECTIVE	AE	X	X	X	3	-	7
2	ARCH5X4	AREA ELECTIVE	AE	X	X	X	3	-	7
2	ARCH590	SEMINAR	AC	0	1	0	0	-	4
2	ARCH592	THESIS PROPOSAL	AC	0	0	0	0	-	4
		Total 5 courses	**TOTAL:**	**3**	**1**	**0**	**9**		**30**
3	ARCH593	THESIS: PART-I	AC	0	0	0	0	-	30
		Total 1 courses	**TOTAL:**	**0**	**0**	**0**	**0**		**30**
4	ARCH594	THESIS: PART-II	AC	0	0	0	0	-	30
		Total 1 courses	**TOTAL:**	**0**	**0**	**0**	**0**		**30**
			GRAND TOTAL:	**9**	**1**	**2**	**22**		**120**

Area and Faculty Elective Courses

No.	Course Code	Course Title	Course Category	Hours			Total Credit	ECTS Credit
				Lecture	Tutorial	Lab/Prac.		
1	ARCH511	BUILDING AND COMFORT	AE	3	0	0	3	7
2	ARCH512	AN INTRODUCTION TO PASSIVE SOLAR BUILDINGS	AE	3	0	0	3	7
3	ARCH513	ENVIRONMENTAL SYSTEMS AND CONTROLS	AE	3	0	0	3	7
4	ARCH514	INTEGRATED APPLICATION PROJECT	AE	3	0	0	3	7
5	ARCH515	BUILDING TECHNOLOGY	AE	3	0	0	3	7
6	ARCH520	URBAN INFRASTRUCTURE PLANNING	AE	3	0	0	3	7
7	ARCH521	CULTURAL HERITAGE AND CITY	AE	3	0	0	3	7
8	ARCH522	RESOURCE CONSERVING	AE	3	0	0	3	7
9	ARCH523	CONSERVATION OF THE HISTORIC ENVIRONMENT	AE	3	0	0	3	7
10	ARCH524	PRINCIPLES OF URBAN POLICY	AE	3	0	0	3	7
11	ARCH525	INTRODUCTION TO THE HISTORY AND THEORY OF ARCHITECTURE	AE	3	0	0	3	7
12	ARCH530	THEORY OF VERNACULAR ARCHITECTURE	AE	3	0	0	3	7
13	ARCH531	HOUSING	AE	3	0	0	3	7
14	STAT522	STATISTICS FOR BASIC SCIENCE	AE	3	0	0	3	7

PROGRAM INFORMATION

General Goal of the Program	The Master of Architecture with Thesis program equips students with advanced skills and specialized research expertise, enhancing their professional and academic careers. By focusing on a specific area of study, students deepen their knowledge, strengthen problem-solving abilities, and refine research, writing, and analytical skills. The program not only develops continuous learning but also enhances career prospects, supporting transitions into leadership and management roles within the industry. As the demand for higher qualifications grows, a postgraduate degree signals dedication to professional growth and academic excellence. Additionally, this thesis-based program offers students a strong foundation for scientific research and academic career paths, benefiting both the students and the university's academic community.
Program Outputs	**1. Architectural Scholarship and Contribution** Develop relevant, timely, original, and creative research questions/hypotheses. Construct research proposals/plans capable of making meaningful contributions to architectural—or urban—scholarship.
	2. Critical Theoretical Understanding Develop the ability to critically investigate the existing literature. Be capable of developing a robust theoretical framework for their academic research addressing theories, philosophies, discourses, and debates within the context of architecture/urban studies.
	3. Advanced Research Methods Be skillful in advanced research methods capable of addressing the complexities of their selected topics and reflect these techniques in the context of a well-structured thesis. Be aware of new technologies and emerging methodologies in architectural research with the ability to extend into professional practice and empirical approaches.
	4. Ethical Scholarship Develop high standards of ethical research practice. Understand professional and academic integrity, intellectual property rights, and social and environmental responsibilities.
	5. Interdisciplinary and Multidisciplinary Research Demonstrate the ability to critically engage with theories, methodologies, practices and insights from a range of other disciplines. Be aware of the importance of connecting research with the industry and market demands.
	6. Sustainability, Resiliency and Environmental Responsibilities Develop a deep understanding of sustainability, resilience, and environmental responsibility principles in architectural research and related empirical applications.
	7. Advanced Academic Communication Develop the skills to express research results and complex theoretical ideas in written, visual, and verbal formats. Have the knowledge to prepare scholarly publications, reports, presentations, and professional communications.

STATISTICS

Total

Courses	Number	Credit	ECTS
All Courses	**10**	**22**	**120**
University Core Courses	0	0	0
Faculty/ School Core Courses	1	3	8
Area Core Courses	5	7	84
Area Elective Courses	4	12	28
Faculty/School electives			
University Elective Courses			
Free Elective Courses			
Course Offered By The Administrating Department			
Course Offered By Other Department			

PER SEMESTER STATISTICS

	Semester								
	1	2	3	4	5	6	7	8	Average
Number of Courses Per Semester	4	5	1	1					2.75
Number of Credits Per Semester	13	9	0	0					5.5
ECTS Credits Per Semester	30	30	30	30					30

COURSE DESCRIPTIONS

Course Descriptions – I: All Area Core and Faculty/School Core courses offered by the department of the program.

Course Code	Course Title	Credit	ECTS Credit	Course Catego.	Pre-requisite	Teaching Language
ARCH501	INTRODUCTORY WORKSHOP	(3, 0, 2)4	8	AC	-	English
Course Content	The introductory workshop is a compulsory course offered at an introductory level to all graduate students at the Faculty of Architecture. Since architecture stands at the intersection of various fields of research, it is important to employ the interdisciplinary nature of professional studies. Therefore, the purpose of this compulsory course is to direct students to carry out certain studies in their different areas of interest, while the subject remains constant within one semester. This course provides the students with different experiences in order to select their area of interest in architecture during their master's degree.					
ARCH502	SUSTAINABLE DEVELOPMENTS	(3, 0, 0)3	8	AC	-	English
Course Content	This course designed to discuss the principle of sustainability; local sustainable development at regional, district and architectural levels; examples of sustainable development at different scales in different countries; Introduction to sustainable development in relation to natural resource conservation, energy conservation, environmental pollution and conservation of bio-diversity; Global issues such as global warming, ozone layer depletion, greenhouse gases, and depletion of natural resources in relation to energy generation; Sustainable development from the perspective of regional and urban planning; Climate considerations in the design of buildings in various climates; Eco-friendly architecture.					
ARCH590	SEMINAR	(1, 0, 0)0	4	AC	-	English
Course Content	Here, students usually make an oral presentation of the topic of their thesis for discussion. Seminars allow students to learn from one another. Many graduate students have work experience and can give new perspectives on educational issues. They can relate which teaching methods worked best with a certain student population, for instance, Seminars also expose students to new ideas and the thoughts of people with different backgrounds. Seminars teach vital skills for teachers and educational specialists like listening; negotiating; leadership; time management. In graduate seminars, because the students have certain expertise, new theories or methods in education can emerge. Knowledge is always evolving and seminar course teachers don't necessarily know all there is to know about a subject.					
ARCH592	THESIS PROPOSAL	(0, 0, 0)0	4	AC	-	English
Course Content	The goal of a proposal is to present the need to study a problem and to present the practical ways in which the proposed study should be conducted. The elements and procedures for conducting the proposed work are governed by standards of the predominant discipline in which the problem resides. The thesis topic will be in a field relevant to the theory and practice of Architecture. At this stage, students are expected to deliver a written proposal with a research question that can be solved through the practices of architectural design, aims and objectives, research method, deliverables, and a literature survey. They should then defend their proposal. Formal writing practices will be used with referencing and proper citations.					
ARCH593	THESIS: PART-I	(0, 0, 0)0	4	AC	-	English
Course Content	This course serves as the initial phase of the Master of Architecture with Thesis program, where students identify and develop a well-defined research problem within the field of architecture. Under the guidance of a supervisor, students conduct an extensive literature review, formulate research questions, and establish their methodology. Emphasis is placed on critical thinking, academic writing, and research ethics. Throughout the semester, students present their progress in seminars, receive feedback, and refine their work accordingly. By the end of the course, a well-structured thesis proposal is submitted, laying the foundation for in-depth research and analysis in Thesis Part-II.					
ARCH594	THESIS: PART-II	(0, 0, 0)0	4	AC	-	English
Course Content	In this course, students progress to the final phase of their master's thesis, conducting comprehensive research, analysis, and synthesis based on the established methodology from Thesis Part-I. They critically engage with theoretical and practical aspects of their topic, producing original insights that contribute to the field of architecture. Under faculty supervision, students refine their findings through seminars, discussions, and feedback sessions, leading to the final dissertation submission and defense. The completed thesis demonstrates intellectual depth, analytical rigor, and research innovation, preparing students for professional or academic advancement.					

Course Descriptions – II: All Area Core and Faculty/School Core courses offered by other academic units.

Course Code	Course Title	Credit	ECTS Credit	Course Catego.	Pre-requisite	Teaching Language
BASC501	RESEARCH METHODS FOR BASIC SCIENCES	(3, 0, 0)3	8	IC	-	English
Course Content	For postgraduate students in the Department of Architecture, it offers an introduction to research methods. The course is immersive and encompasses a number of areas of expertise and skills. The course provides students with vital tools to conduct ethical and independent research. It teaches how research questions can be created, conceptual and analytical structures created, critical literature reviews made, fields entered and researched, and a research report published. Topics cover general principles and methods of study for the theoretical analysis process; social behavioral and remarkable studies on architecture, urban design, and interior architecture; effective methods that lead to the development of design concepts and the preparation of qualitative and quantitative aspects of research on architectural, interior and urban design.					
STAT522	STATISTICS FOR BASIC SCIENCE	(3, 0, 0)3	7	AE	-	English
Course Content	The following topics will be covered in this course: Descriptive statistics and inferential statistics; Using SPSS statistics program data entry and data editing for analysis; Displaying data in tables; visualizing data with graphs and figures; normal distribution; sampling distribution of the mean; sampling distribution of the difference; standard error of the mean; standard error of the difference; creating confidence intervals for different significance levels; writing research questions and research hypotheses; null hypothesis and hypothesis testing; testing the difference between population means; t-tests (one-sample t-test, independent samples t-test, dependent samples t-test); analyses of variance (one-way ANOVA, two-way ANOVA, ANCOVA); correlation and multiple linear regression; exploratory factor analysis; reliability test; nonparametric tests (chi-square test; Mann Whitney-U test; Kruskal-Wallis test).					

Course Descriptions – III: All Area Elective and Faculty/School Elective courses offered by the department of the program.						
ARCH511	**BUILDING AND COMFORT**	(3, 0, 0)**3**	7	AE	-	English
Course Content	A course designed to assess comfort by assembling the human, building, and environment relationship at the design level. An architect's job is to provide a safe and comfortable living space for the building's users (human beings). The decisions made by architects during the design and usage process should not impact human comfort in case of accomplishing this mission. The main emphasis of this course will be on the relationship of building and health, by giving definitions of humans, building (physical and social characteristics of building), and environment. The risks (possible health effects) and solutions will be discussed from an architectural point of view.					
ARCH512	**AN INTRODUCTION TO PASSIVE SOLAR BUILDINGS**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This course introduces the basic passive solar heating/ cooling systems for buildings; including solar direct gain, day lighting, PV panels, thermal storage walls, sunspaces, and incremental cooling load. Also, this course will cover climatic considerations including weather parameters, climate-driven conservation measures, and solar availability. Furthermore, this course can be considered as a guideline for schematic design of passive solar building heating/ cooling systems by discussing various issues such as; building shape and orientation, non-south windows, passive heating/cooling system characteristics, insulation levels, infiltration, solar collection areas, thermal storage mass and etc.					
ARCH513	**ENVIRONMENTAL SYSTEMS AND CONTROLS**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This is an introductory course to the environmental system's sequence, explores heating, cooling, ventilation, and lighting in the context of building design. In this course, the students will examine the factors that collectively lead to the design of relevant and appropriate thermal, atmospheric, and luminous environments for different building types. They will develop an awareness of the impact of climate on the buildings' design and an understanding of how buildings provide environmental control. In addition, they will be able to criticize buildings' environmental control systems and to formulate an appropriate environmental strategy for a building and integrate it within the broader context of architectural design.					
ARCH514	**INTEGRATED APPLICATION PROJECT**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This course aims to synthesize the occupational knowledge gained in the theoretical disciplines and the actual application. Students are provided with the awareness and ability of integrating the environmental, spatial, structural, functional and aesthetical decisions that are essential for the construction of a building in a holistic manner. Within this context, it is aimed to encourage students to search and to create their own solutions according to their project proposals. The course deals with the application drawings of the completed architectural project in detail by applying presentation techniques and standards. Within this process, it is also expected to equip students with professional practice.					
ARCH515	**BUILDING TECHNOLOGY**	(3, 0, 0)**3**	7	AE	-	English
Course Content	The primary mission of architects is; to do a sustainable design, considers environmental criteria; introduction of the theory and concepts related to sustainability in building technology; to examine them at the scales of building material, element and overall building; definition of performance requirements and their relationship with the available technologies; to apply the theoretical knowledge of construction design; to practice through case studies and assignments, the definition of sub-systems and their integration and so on. However, the study of building technology covers the planning for the creation of residential or commercial properties, as well as structures.					
ARCH520	**URBAN INFRASTRUCTURE PLANNING**	(3, 0, 0)**3**	7	AE	-	English
Course Content	The aim of this course is to understand the importance of infrastructure planning for appropriate development schemes. This course has an introduction to infrastructure planning, definition and categorization of infrastructure as applicable to urban and rural planning. Energy- classification and characteristics, energy use, and energy demand in different sectors of economy and settlement; Comparative energy statistics; Planning for energy needs; Concepts and guidelines. Water supply and drainage systems; Planning for integrated and sustainable management of water system. Solid waste management; Nature and classification of urban waste; Working of the existing system and shortcomings. Social infrastructure for a different size and types of human settlements and standards; Planning for educational, health, recreational and socio-cultural facilities, amenities for different categories of urban.					
ARCH521	**CULTURAL HERITAGE AND CITY**	(3, 0, 0)**3**	7	AE	-	English
Course Content	Almost half of the world's population lives in large or small cities today. Students should be provided with knowledge of urban sociology (on an introductory basis) as candidates for one of the main actors that will affect the physical urban environment in order to be able to make effective proposals for urban dwellers. The main objective of this module is to provide students with comprehensive knowledge of the urbanization process, the consequences of urban life, and the challenges of urban areas today.					
ARCH522	**RESOURCE CONSERVING**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This course is an introduction to classification and characteristics of resources, a brief review of use/ exploitation of the resource for development in human history; concepts and need for conservation, renewable and non-renewable resources. Basic concepts, parameters and principles of energy conservation; patterns and efficiency of energy use in architecture; technologies, methods of energy conservation. Conserving building materials, water, land and so on in architecture. Fundamentals of planning and design of resource conserving architecture; innovative and appropriate design concepts and construction technologies.					
ARCH523	**CONSERVATION OF THE HISTORIC ENVIRONMENT**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This course will help the students to obtain key knowledge in the conservation of buildings and the historical context with practical skills-based workshops and lectures. The main purpose of this module is to propose an introduction both on conceptual and implementation grounds (theory and practice) to the philosophy of conservation. Awareness of principles (generalized values, universal in scope to be respected at work), standards (measurable objectives, local/regional in scope) and prescribed practices (desired behavior or behaviors, local in scope) will be given to the students in order to comply with applied principles and standards.					

ARCH524	**PRINCIPLES OF URBAN POLICY**	(3, 0, 0)**3**	7	AE	-	English
Course Content	Urban policy is a conceptual and systematic activity by a public authority, aimed at the development of cities. The course discusses how economic, political and social forces work together to influence policy approaches in the various spatial environments and how planning approaches reflect this. Also, the course discusses the urban areas characteristics, categories of a town, classification of settlement based on form, use, scale etc., densities of a town, planning process, various stages of the planning process with relevant examples, surveys in planning, physical characteristics, utilities, population, employment and industry, housing, commercial issues and transportation, land use, plans; regional plan, Master plan, zonal development plan, structure plan and transportation plan.					
ARCH525	**INTRODUCTION TO THE HISTORY AND THEORY OF ARCHITECTURE**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This course provides an outline of the history of architecture and urbanism, from the first societies to the present. Students analyze buildings and the built environment as the products of culture and in relation to the special problems of architectural design and the history of architecture, with an urbanism perspective that stresses the cultural and political context from which building arises. The course develops critical tools for the analysis and appreciation of architecture, for its role in the intellectual environment in which we conduct our lives. Instruction and practice in oral and written communication are provided.					
ARCH530	**THEORY OF VERNACULAR ARCHITECTURE**	(3, 0, 0)**3**	7	AE	-	English
Course Content	The majority of the built environment is represented by vernacular architecture. It has legitimate reasons to be remembered as "the people's architecture". Vernacular is the architecture of the common, ordinary citizens, not upper class or avant-garde, and covers various scales of repeated patterns or ideal forms with variations, such as unique geographic area, settlement, and constructed form itself. The main objective of this course is to provide an introduction to the philosophical theories applicable to the vernacular, as well as to provide the accumulative information necessary in the general study of vernacular architecture.					
ARCH531	**HOUSING**	(3, 0, 0)**3**	7	AE	-	English
Course Content	This is a 'Housing' course relevant to its ideas and practices. The goal of the course is twofold: first, to introduce the diversity and richness of the subjects covered by the 'Housing' sector to the students, and second, to help students enrich their studies and researches by finding relevant examples. In other words, it tries to consider; qualitative and quantitative needs in the field of housing at a global level; the problem in the field of housing in developing countries; the peculiarities of urban housing land for urban housing - problems and possible solutions; the relationship between place of work and home.					