BACHELOR OF ENGINEERING IN ARCHITECTURE

Main Language of Instruction:
French ☑ English ○ Arabic ○

Campus Where the Program Is Offered: CST

OBJECTIVES

The architecture program is designed to train architects through an education that is both hands-on and innovative, centered on architectural studios and teamwork in a multilingual and multicultural framework. These students should be able to:

- Pursue specialized practical or theoretical graduate studies in internationally renowned universities.
- Become designers, creators, and decision-makers in the construction field.
- Collaborate with major local or international architectural firms.

PROGRAM LEARNING OUTCOMES (COMPETENCIES)

- Identify and understand complex issues related to architecture and its rural and urban context.
- Identify and compare the different architectural theories and trends throughout history.
- Acquire, handle, manage and apply new knowledge using advanced digital tools, and use relevant learning methods.
- Analyze and address different contexts, including rural, urban, environmental, social, cultural, and identity-related factors.
- Effectively communicate with diverse audiences.
- Conceptualize and envision adequate design solutions.
- Collaborate with a team whose members jointly provide leadership, foster a collaborative and inclusive environment, plan tasks, and achieve objectives.
- Apply technical and legal regulations.
- Recognize ethical and professional responsibilities in architectural situations and formulate critical opinions that must take into account the impact of architectural solutions in global, economic, environmental, and societal contexts.
- Develop and conduct relevant experiments, analyze and interpret data, and use architectural judgment to draw conclusions.
- Effectively monitor and manage construction sites.
- Produce clear and updated execution documents, including detailed plans related to architecture, structure, electromechanics, environment, and a detailed description of technical specifications.
- Design, create and innovate several complex architectural projects, addressing analytical, conceptual, architectonic, legal, financial, and technical aspects while maintaining overall project coherence.

PROGRAM REQUIREMENTS

342 credits: Required courses (287 credits), Institution's elective courses (12 credits), Open elective courses (6 credits), and USJ General Education Program (37 credits).

Fundamental Courses (299 Cr.)

Required Courses (287 Cr.)
Architecture Studio I: Introduction to Design (10 Cr.). Architecture Studio II: Introduction to Architectural Project (10 Cr.). Architecture Studio II: Advanced (8 Cr.). Architecture Studio III: Housing and Structure (10 Cr.). Architecture Studio IV: Equipping the City (10 Cr.). Advanced Studio I (10 Cr.). Advanced Studio II (10 Cr.). Advanced Studio III (10 Cr.). Advanced Studio IV (10 Cr.). Introduction to Research (4 Cr.). Final Year Project I: Project Choice and Thesis (8 Cr.). Final Year Project II: Preliminary Design (15 Cr.). Final Year Project III: Detailed Design and Final Defense (22 Cr.). Studio - Developed Project I (8 Cr.). Studio - Developed Project II (10 Cr.). Introduction to Design and Digital Manufacturing (4 Cr.). Representing Architecture I: Introduction (3 Cr.). Representing Architecture II: Deepening (3 Cr.). Representing Architecture III: Development of a Particular Style (3 Cr.). Geometry and Architecture I (4 Cr.).

Geometry and Architecture II (3 Cr.). Digital Tools I: Introduction (3 Cr.). Digital Tools II: Deepening (3 Cr.). Digital Tools III: Advanced (3 Cr.). In-situ: Introduction (3 Cr.). Architecture Elements (3 Cr.). History of Architecture: From the 19th to the 20th Century (4 Cr.). Societies, Culture and Way of Life (2 Cr.). History of Architecture: From the Origin to Antiquity (4 Cr.). Philosophy and Reality of Living (2 Cr.). History of Architecture: From the Middle Ages to the Renaissance (4 Cr.). Lebanese Architectural Heritage and Surveys (4 Cr.). History of Contemporary Architecture (4 Cr.). Facing the Existing Building: Preservation, Restoration and Transformation (2 Cr.). Art and Architecture (2 Cr.). Landscape and Architecture (2 Cr.). Architecture, City and Territory: Contemporary Issues and Strategies (4 Cr.). Analysis and Critical Thinking in Architecture (3 Cr.). Architecture and Urban Planning (4 Cr.). Building Technology I: Notions (3 Cr.). Building Technology II: Structural Work and Circulation (4 Cr.). Building Technology III: Envelopes and Facades (4 Cr.). Building Technology IV: Interior and Finishes (4 Cr.). Art of Structures (3 Cr.). Static (2 Cr.). Strength of Materials (4 Cr.). Structural Design: Bases and Reinforced Concrete (4 Cr.). Structural Design: Structural Systems and Frameworks (4 Cr.). Building Physics (2 Cr.). Equipment and Comfort (4 Cr.). Equipment and Flows (4 Cr.). Climate, Ecology and Architecture (4 Cr.). Environmental Certification (2 Cr.). Professional Internship (3 Cr.). Photographing Space (3 Cr.). Fire Safety (2 Cr.).

Institution's Elective Courses (12 Cr.), to be chosen from the list below:
Urban Planning Workshop (4 Cr.). Materials and Making Workshop (2 Cr.). Last Dwellings (4 Cr.). Sublime Beirut (2 Cr.). "Anarchiteture" (4 Cr.). Urban Foresight (2 Cr.).

Open Elective Courses (6 Cr.)

USJ General Education Program (37 Cr.)

Code	Course Name	Credits
	ENGLISH OR OTHER LANGUAGE	**4**
538ANGAS8	English	4
	ARABIC	**6**
	Arabic Language and Culture	**2**
538PHAAS5	Philosophy and Architecture	2
	Other Course Taught in Arabic	**4**
538GDCAS6	Construction and Real Estate Law	4
	HUMANITIES	**10**
064VALEL1	USJ Values in Daily Life	2
	Ethics	**4**
538ETAAS5	Ethics and Architecture	4
	Civic Engagement and Citizenship	**2**
538CPHAS3	Philosophy and the Reality of Dwelling	2
	Other Humanities Course	**2**
538CARAS6	Architecture and Religions	2
	SOCIAL SCIENCES	**6**
	Professional Integration and/or Entrepreneurship	**6**
538GPRAS8	Professional Practice and Ethics	2
538GMPAS9	Project Management	4
	COMMUNICATION TECHNIQUES	**4**
538TECAS0	Communication Skills	4

	QUANTITATIVE TECHNIQUES	7
538SMAAS1	Applied Mathematics for Architecture I	4
538SMAAS3	Applied Mathematics for Architecture II	3

SUGGESTED STUDY PLAN

Semester 1

Code	Course Name	Credits
538PA1AS1	Architecture Studio I: Introduction to Design	10
538RGAAS1	Geometry and Architecture I	4
538RA1AS1	Representing Architecture I: Introduction	3
538CISAS1	In-situ: Introduction	3
538SPBAS2	Building Physics	2
538ST1AS1	Building Technology I: Notions	3
538SELAS1	Architecture Elements	3
	Total	**28**

Semester 2

Code	Course Name	Credits
538PA2AS2	Architecture Studio II: Introduction to Architectural Project	10
538RA2AS2	Representing Architecture II: Deepening	3
538RD1AS2	Digital Tools I: Introduction	3
538CH1AS2	History of Architecture: from the 19th to the 20th Century	4
538SS1AS2	Art of Structures	3
538SMAAS1	Architecture Applied Mathematics I	4
538CSMAS2	Societies, Culture and Way of Life	2
538RGAAS2	Geometry and Architecture II	3
	Total	**32**

Summer Trimester

Code	Course Name	Credits
538PAAAS2	Architecture Studio II: Advanced	8
	Total	**8**

Semester 3

Code	Course Name	Credits
538PA3AS3	Architecture Studio III: Housing and Structure	10
538RPEAS3	Photographing Space	3
538CH2AS3	History of Architecture: From Origin to Antiquity	4
538CPHAS3	Philosophy and Reality of Living	2
538ST2AS3	Building Technology II: Structural Work and Circulation	4
538CAAAS3	Art and Architecture	2
538SSTAS3	Static	2

538RD2AS3	Digital Tools II: Deepening	3
	Institution's elective course	2
	Total	**32**

Semester 4

Code	Course Name	Credits
538PA4AS4	Architecture Studio IV: Equipping the City	10
538CPLAS4	Lebanese Architectural Heritage and Surveys	4
538CH3AS4	History of Architecture: From the Middle Ages to the Renaissance	4
538ST3AS4	Building Technology III: Envelopes and Facades	4
538SECAS4	Equipment and Comfort	4
538SRMAS4	Strength of Materials	4
538SMAAS3	Architecture Applied Mathematics II	3
	Open Electives	2
	Total	**35**

Summer Trimester

Code	Course Name	Credits
538PPDAS5	Studio - Developed Project I	8
	Total	**8**

Semester 5

Code	Course Name	Credits
538PA1AS5	Advanced Studio I	10
538RA3AS5	Representing Architecture III: Development of a Particular Style	3
538CH4AS5	History of Contemporary Architecture	4
538CBEAS5	Facing the Existing Building: Preservation, Restoration and Transformation	2
538SS3AS5	Structural Design: Bases and Reinforced Concrete	4
538ETAAS5	Ethics and Architecture	4
538CAUAS5	Architecture and Urban Planning	4
538RD3AS8	Digital Tools III: Advanced	3
	Total	**34**

Semester 6

Code	Course Name	Credits
538PA2AS6	Advanced Studio II	10
538CPAAS6	Landscape and Architecture	2
538ST4AS6	Building Technology IV: Interior and Finishes	4
538SE1AS6	Climate, Ecology and Architecture	4
538GDCAS6	Construction and Real Estate Law	4
538CSUAS6	Urban Sociology	2
538PHAAS5	Philosophy and Architecture	2

538SSIAS8	Fire Safety	2
	Open electives	2
	Total	**32**

Summer Trimester

Code	Course Name	Credits
538PD2AS7	Studio - Developed Project II	10
	Total	**10**

Semester 7

Code	Course Name	Credits
538PA3AS7	Advanced Studio III	10
538CTVAS7	Architecture, City and Territory: Contemporary Issues and Strategies	4
538SS4AS7	Structural Design: Structural Systems and Frameworks	4
538GSPAS7	Professional Internship	3
538CPCAS7	Analysis and Critical Thinking in Architecture	3
538CARAS6	Architecture and Religions	2
538PFDAS7	Introduction to Design and Digital Manufacturing	4
	Institution's elective course	4
	Total	**34**

Semester 8

Code	Course Name	Credits
538PA4AS8	Advanced Studio IV	10
538PIRAS8	Introduction to Research	4
538SEFAS8	Equipment and Flows	4
538GPRAS8	Professional Practice and Ethics	2
538ANGAS8	English	4
064VALEL1	USJ Values in Daily Life	2
	Institution's elective course	2
	Open electives	2
	Total	**30**

Summer Trimester

Code	Course Name	Credits
538PP1AS8	Final Year Project I: Project Choice and Thesis	8
	Total	**8**

Semester 9

Code	Course Name	Credits
538PP2AS9	Final Year Project II: Preliminary Design	15
538SE2AS9	Environmental Certification	2

538GMPAS9	Project Management	4
	Institution's elective course	4
	Total	**25**

Semester 10

Code	Course Name	Credits
538PP3AS10	Final Year Project III: Detailed Design and Final Defense	22
538TECAS0	Communication Skills	4
	Total	**26**

COURSE DESCRIPTION

Project, Research and Thesis:

538PA1AS1 Architecture Studio I: Introduction to Design 10 Cr.

The objective of this studio is the acquisition of the basic principles of design. Through a series of thematically varied projects with specific objectives, students acquire key concepts, learn about experimentation, and practice drawing and modeling.
Number of projects carried out: 4 or 5.
Learning outcomes: Formal and volumetric research, design and development of architectural elements, structural integrity, experimentation with various materials, material-form-structure-function relationship, composition process (transformation, iteration, assemblies, etc.), exploration of the concepts of movement and performance in space, proportions and scale, experimentation with light/shadow relationships, organization and graphical presentation, documentation of the artistic process.
Project deliverables: Handcrafted models and graphic boards, to be specified by the instructors.

538PA2AS2 Architecture Studio II: Introduction to Architectural Project 10 Cr.

This studio is an introduction to the architectural project. Its objective is to introduce and provide the means to address fundamental architectural notions linked to the form, use and experience of space. Modeling and drawing are explored as tools for the design and empirical investigation of notions of composition, proportion, scale, light, place and time.
Number of projects carried out: 3 or 4.
Learning outcomes: Materialize a situation/scenario through a spatial experience, conceptualize an abstract idea or an experience, sequence and architectural journey, body/space relationship (scales, proportions), arrangement of spaces (static/dynamic), impact of natural light on the space, site analysis and architectural integration into an urban site (party walls, alignments, etc.), experimentation with structural systems, structural hierarchy (pillars, beams, etc.) and form-structure-materials relationship, design of a simple architectural program (small dwelling, neighborhood equipment) and development of its functional organization chart, representation by geometric drawing and model, structuring an oral presentation.
Project deliverables: Handcrafted models and graphic boards. The model is mandatory for all projects (study models and final models). The projects' deliverables will be specified for each project by the instructors (conceptual research and organization chart, plans, sections, facades). Axonometry and/or perspective will be required for at least one project.
Prerequisite: Architecture Studio I: Introduction to Design (538PA1AS1)

538PAAAS2 Architecture Studio II: Advanced 8 Cr.

This studio is a continuation of Architecture Studio II. Its objective is to give the student time to assimilate, master and develop in more depth the concepts discussed in the previous studio.
Number of projects carried out: 2.
Prerequisite: Architecture Studio II: Introduction to Architectural Project (538PA2AS2)

538PA3AS3 Architecture Studio III: Housing and Structure 10 Cr.

This studio addresses specific themes specific to a program (housing), logic (structure) and context (the natural environment). Creative investigation covers contextual features such as topography, orientation, climate and vegetation as well as structural logics through observation, research and manufacturing. An individual or collective housing program addresses the notion of inhabiting a natural site and tests the relationship conceived between the site, the material and its structural and environmental potentialities and the creation of architectural space.
Number of projects carried out: 3 projects (site analysis, concept, project), including an individual housing project with application of the structure.
Learning outcomes: Site analysis, individual housing program, collective housing, integration into sloping land, structure and layout, parking, introduction to regulations/surface calculation (FAR, BCR, setbacks, maximum height, etc.). Introduction to small-scale housing with increasing complexity allowing for the approach of mounting, module processing, housing design tools, structure and organization of space, housing typologies (simplex, duplex), adjoining and opposite, interior and exterior development, materiality and structure, composition of rendering elements and organization of boards, drawing techniques.
Project deliverables: Boards including plans, sections, facades and perspective (scales and format to be defined by the instructors), intention models and conceptual model.
Topics related to the "Philosophy and Reality of Living" course.
Prerequisite: Architecture Studio II: Introduction to Architectural Project (538PA2AS2)

538PA4AS4 Architecture Studio IV: Equipping the City 10 Cr.

The studio explores multiple facets of architectural intervention in an urban context. It approaches the analysis and representation of the city as a means of reflection on public space and the dialectical relationship between buildings and the society that inhabits them. The notions of program, accessibility and materiality are developed through a series of public equipment projects of different scales.
Number of projects carried out: 3 projects.
Urban analysis (group work), urban intervention (individual work)
2 public equipment projects
Learning outcomes: Master urban analysis and suggest an architectural program in response to the identified issues, develop a public equipment program (e.g. cultural, health, leisure, mixed, etc.), integrate into an urban site. Manage constraints related to accessibility, flows, interior-exterior spatial continuities, structure, parking, and regulations. Experiment with form-materials-structure relationships.
Urban analysis and urban intervention:

- Site visits, urban discovery, investigation, meeting users and analyzing their practices, taking photos, sketches, etc.
- The history of the site, introduction to the search for resources
- Analysis of urban elements: road systems and traffic, building morphology, open spaces, urban atmospheres (sunshine, lighting, sound, activity, etc.), flows and permeabilities, etc.
- The cartographic representation of urban morphology: full and empty spaces, the age of the building, heights, functions, etc.
- Development of a problematic drawn from the various findings in order to initiate the project guidelines.
- Proposal for a program and development of an individual project following the analysis carried out within the group

Prerequisite: Architecture Studio III: Housing and Structure (538PA3AS3)

538PPDAS5 Studio - Developed Project I 8 Cr.

The developed project is an introduction to the design development and execution drawings of a project. At the end of studio IV, students will choose one of the projects covered during studios III and IV and develop it in detail for two months. The practical and technical aspects related to the realization of the project are addressed here in more depth.
Learning outcomes: Structure, developed plans (axes, double walls, shafts, technical rooms, etc.), developed sections and elevations, wall sections and details (waterproofing, joints, aluminum, etc.), stairs, openings catalog.
Prerequisite: Architecture Studio III: Housing and Structure (538PA3AS3)

538PA1AS5 Advanced Studio I 10 Cr.

This first advanced studio introduces students to a multidisciplinary and thematic approach to architecture. It explores a wide range of scales and design strategies, encouraging exposure to related fields in order to enrich architectural exploration and foster innovative responses.
Main Areas of Focus:
Architecture and Urban/Rural and Social Fabric: Analysis of urban space, diagnostic work, and programmatic proposals to address urban issues.
Architecture and Heritage: Design within a heritage context and/or working with existing architecture (integration, rehabilitation).
Architecture, Landscape, and Sustainable Development: Design interventions that respond to natural constraints (e.g., coastal sites, steep slopes) while implementing environmental sustainability strategies.
Architecture and Territory: Intervention on sites with broken or ambiguous territorial relationships (urban ruptures, former demarcation lines, peripheral areas) with the aim of revitalization and restoring territorial identity.
Learning Outcomes:
Identification of urban and territorial challenges
Integration of projects within natural, built, social, and cultural contexts.
Management of multiple programs and uses.
Development of typologies with modularity and adaptability
Mastery of structural and construction systems aligned with architectural expression.
Number of Projects: 2
Prerequisite: Architecture Studio IV: Equipping the City (538PA4AS4)

538PA2AS6 Advanced Studio II 10 Cr.

This second advanced studio builds on the foundations laid in Advanced Studio I. It allows students to consolidate their ability to handle multidisciplinary projects while deepening their engagement with urban, heritage, landscape, and territorial issues.
Number of projects carried out: 2 projects.
Prerequisite: Advanced Studio I (538PA1AS5)

538PA3AS7 Advanced Studio III 10 Cr.

This third studio further develops the approaches explored in the previous advanced studios. Students are encouraged to produce increasingly complex projects that integrate multiple programs and critically engage with the social and territorial context.
Number of projects carried out: 2 projects.
Prerequisite: Advanced Studio II (538PA2AS6)

538PA3AS8 Advanced Studio IV 10 Cr.

This fourth and final advanced studio is a synthesis of all previously acquired skills. Students are expected to deliver projects that fully integrate conceptual, technical, structural, and contextual dimensions, serving as preparation for the Final Year Project.
Number of projects carried out: 2 projects.
Prerequisite: Advanced Studio III (538PA3AS7)

538PD2AS7 Studio - Developed Project II 10 Cr.

The second developed project builds on the skills acquired in the previous developed project studio. It serves as an introduction to design development and construction documentation. The student will choose one of the projects covered during studios III and IV, or Advanced Studios I, II, or III, and will develop it in detail over a two-month period. Practical and technical aspects related to the execution of the project are addressed here in greater depth.
Learning outcomes: Structure, developed plans (grids, double walls, shafts, technical rooms, etc.), developed sections and elevations, wall sections and various construction details (waterproofing, joints, aluminum systems, etc.), stairs, bathrooms.
Prerequisite: Studio – Developed Project I (538PPDAS5)

538PIRAS8 Introduction to Research 4 Cr.

The objective of this course is to introduce students to research-based design and the central role it plays in the creation of an architectural project. The course explores key architectural problematics and supports the construction of personal hypotheses based on a critical reading of various theoretical texts. Moreover, this course is an introduction to the final thesis work, covering the fundamentals of writing a methodical text and the articulation of a particular research question.

538PFDAS7 Introduction to Design and Digital Manufacturing 4 Cr.

The objective of this studio is the introduction to digital manufacturing tools and new design technologies (CNC fabrication, laser and 3D printing, etc.). Experimentation, manufacturing and full-scale installations are also covered. The course includes visits/work in the workshop of professionals to produce prototypes of the designed objects.
Prerequisite: Architecture Studio IV: Equipping the City (538PA4AS4)

538PP1AS8 Final Year Project I: Project Choice and Thesis 8 Cr.

In this studio, students define and methodologically explore a personal topic. They develop a research project based on a theme addressed in the critical research seminar, evaluate it, and produce a final thesis accompanied by a forward-looking outline of the Final Year Project to be pursued.
Critical research seminars address specific topics – heritage, theory, ecology, community, form and others – and are connected to the Final Year Project II. The theoretical and referential contributions of the seminars serve to question a topic and situate the students' personal research within a broader intellectual and historical context.
Prerequisite: 4 Advanced Studio courses + Introduction to Research (538PIRAS8) + a total of 252 credits.

538PP2AS9 Final Year Project II: Preliminary Design 15 Cr.

The Final Year Project II represents a comprehensive synthesis of the academic curriculum. It serves as a test of the theoretical and practical knowledge acquired by the student, throughout the four academic years spent at the University, culminating in a preliminary design proposal that addresses the architectural concept stemming from the chosen site, theme, and program. This is only possible following an in-depth analysis, enabling the student to develop a synthetic and well-thought-out vision across multiple levels: architectural, urban, heritage-related, and environmental.
Prerequisite: Final Year Project I: Project Choice and Thesis (538PP1AS8)

538PP3AS10 Final Year Project III: Detailed Design and Final Defense 22 Cr.

To finalize their diploma project, students will further develop their preliminary design proposal elaborated during the previous semester using their advanced knowledge in architecture and engineering (materials, structure, electricity, mechanical systems, safety, ecology, etc.). They will present a final project that addresses all architectural, technical and environmental aspects.
Prerequisite: Final Year Project II: Preliminary Design (538PP2AS9)

Performing Arts and Techniques

538RA1AS1 Representing Architecture I: Introduction 3 Cr.

The objective of this course is to introduce students to the representation of simple shapes. It aims to introduce freehand analog drawing from observation. It also allows students to design and visually express themselves by translating perceptual experiences through different representation tools and media. It is a foundational and accelerated course that introduces students to the notions of proportion, composition, and the use of horizontal and vertical reference lines as well as perspective. Moreover, the course offers a condensed overview of the history of architectural representation through image analysis and visualization. At the end of the course, students will be assembling a portfolio of their work, providing an introduction to digital image editing tools.

538RA2AS2 Representing Architecture II: Deepening 3 Cr.

The objective of this second course in the "Representing Architecture" sequence is to deepen students' representation skills. The course evolves from a primarily studio-based teaching to a site-reading approach, where urban and landscape sketching enhances the ability to represent rhythms, movements and lights. The student will be introduced to the iteration process and narration in contemporary architectural representation through collage, infographics, and other types of multimedia drawing. The design of a portfolio publication bringing together all the course work further develops the use of graphic tools introduced in the first semester.
Prerequisite: Representing Architecture I: Introduction (538RA1AS1)

538RA3AS5 Representing Architecture III: Development of a Particular Style 3 Cr.

The objective of this third and final course in the "Representing Architecture" sequence is to help students develop their own style and encourage them to take a critical look at this aspect of the discipline. This is an advanced course on representation, which focuses on the production of complex drawings. In addition, the course invites open reflection on graphic activity in architecture by questioning the evolution of contemporary representation methods. It also develops written and verbal presentation skills, which complement graphic representation work. Students are introduced to the web design process, enabling them to create a professional identity by digitally combining a selection of their best drawings and projects created in the studio.
Prerequisite: Representing Architecture II: Deepening (538RA2AS2)

538RGAAS1 Geometry and Architecture I 4Cr.

This course introduces students to the fundamental techniques of geometric drawing by hand, using professional architectural drafting tools. It combines the development of both spatial and technical thinking, enabling students to visualize and reason about form and space.
Geometry is presented as an essential tool for all other sciences and techniques of architecture. Students will learn to "see" in space, to understand geometric conventions, and to accurately represent three-dimensional objects. The course emphasizes mastering projection operations, axonometric drawing, shadows, and perspectives, thereby equipping students with the representational skills necessary for architectural design and communication.

538RGAAS2 Geometry and Architecture II 3Cr.

This course builds upon the foundations of descriptive geometry, specifically focusing on the study and mastery of architectural perspective. Its primary objective is to deepen students' understanding of three-dimensional representation techniques and enable them to translate architectural concepts into precise and expressive perspective drawings.
Students will be introduced to the different types of perspective (one-point, two-point, and multi-point). The course will also address the study of proportion and depth, as well as the application of light and shadow to enhance realism and expressiveness in compositions.
Through hands-on exercises, students will develop the ability to conceptualize, draw, and communicate complex volumes. This course prepares students to apply these techniques to concrete architectural projects, strengthening the link between spatial thinking and graphic representation.
Prerequisite: Geometry and Architecture I (538RGAAS1)

538RD1AS2 Digital Tools I: Introduction 3 Cr.

The objective of this course is to introduce students to digital tools for representation and design, as well as to geometric conventions. The techniques previously explored through freehand and guided manual drawing in prerequisite courses will now be digitally developed using a range of software tools.
Students will learn to represent space through computer-aided drawing, beginning with two-dimensional (2D) representations and progressing to three-dimensional (3D) modeling using AutoCAD. The course emphasizes observation and representation through orthogonal projections, conventional drawings (plans, sections, elevations, perspectives), and the digital construction of complex surfaces.
Prerequisite: Geometry and Architecture I (538RGAAS1)

538RD2AS3 Digital Tools II: Deepening 3 Cr.

The objective of this course is to deepen students' knowledge of digital representation and design. The course introduces the geometry of Boolean operations, which are essential for understanding parametric representation and the graphical modeling of complex forms and volumes.
Students will gain hands-on experience with advanced 3D modeling software, such as 3ds Max, Rhinoceros, and Grasshopper, with the tools evolving in step with technological advancements. Emphasis is placed on developing a parametric and algorithmic design mindset, enabling students to explore generative processes and complex digital forms.
Prerequisite: Digital Tools I: Introduction (538RD1AS2)

538RD3AS8 Digital Tools III: Advanced 3 Cr.

This course concludes with the three-course digital tools sequence with an integrative and forward-looking synthesis. It focuses on the latest developments in digital design and representation software, providing students with the skills to produce comprehensive and professional final deliverables for architectural projects.
Students will review and consolidate the full range of digital design, modeling, and construction tools learned in previous courses. Emphasis is placed on workflow integration, from conceptual modeling to detailed documentation and rendering. The course introduces Building Information Modeling (BIM) environments such as Revit (or equivalent software), enabling students to coordinate design, documentation, and visualization within a single platform.
Prerequisite: Digital Tools II: Deepening (538RD2AS3)

History, Context and Culture

538CISAS1 In-situ: Introduction 3 Cr.

The objective of this course is to introduce students to the concept of site or context into which future architectural interventions must be inserted, along with the multiple factors that influence and shape this notion.
Observation and multi-layered exploration of sites will be conducted throughout the semester. A careful reading of the site is considered a sine qua non condition for designing meaningful and responsible architecture. The course encourages students to use both creativity and scientific reasoning to shape the built environment in the long-term interest of all living beings.
Drawing on the Roman concept of Genius Loci (the "spirit of the place"), the course is structured around three main themes:
Natural Sites: Examination of topography, vegetation, watercourses, hills, and human interventions in the natural landscape.
Urban Context: Analysis of the cultural and built environment, including heritage and urban fabric.
Ecology and Activism: Study of the environmental and cultural value of ecological sites, relevant legislation and their application, and the key factors required for an environmentally responsible practice.
While simultaneously addressing multiple layers, each theme will focus on a specific aspect of the site through maps, models, readings, films, research assignments, and student presentations.
Content Overview:
Geology and geography
Movement of the Earth and the sun
Natural regions and climatic zones
Rural vs. urban regions and their interrelations
Ecological and environmental approaches.

538CH1AS2 History of Architecture: From the 19th to the 20th Century 4 Cr.

The objective of this course is to introduce students to the architectural developments of the 19th and 20th centuries – a fascinating period marked by the emergence of increasingly sophisticated materials, the diffusion of multiple stylistic inspirations, and profound, rapid social transformations. Architecture during this era experienced an acceleration and proliferation of movements, each responding to new technologies and evolving ideologies.
Content Overview:
Historicism – Art Nouveau – International Style – Organic Architecture – Deconstructivism.

538CSMAS2 Societies, Culture and Way of Life 2 Cr.

The objective of this course is to introduce students to the cultural norms, social rhythms, environment, and modes of dwelling, while emphasizing that culture is a human creation that is continuously redefined and reinvented. Positioned at the intersection of private–family and public spheres, the course examines the wide diversity of practices, attitudes, and lifestyles across different societies.
This diversity is reflected in the consumption of material and cultural goods, customs and moral codes, uses of space and time, domestic organization, and modes of social integration. These elements vary depending on climate, value systems, cultural forms, and habits. As anthropologist Ralph Linton reminds us, "A culture is the way of life of a society."
Content Overview:
Primitive societies and their organizational structures
Traditional societies
Contemporary societies
From ways of life to modes of dwelling.

538CH2AS3 History of Architecture: From the Origin to Antiquity 4 Cr.

The objective of this course is to introduce students to the theological, ideological, and theoretical foundations that accompanied the works of Antiquity and the early stages of architecture. The course aims to provide students with the ability to understand and use the vocabulary of art, architecture, and urbanism, as well as to identify and name the key stylistic characteristics of artistic, architectural, and urbanistic production from the periods studied. By the end of the course, students will be able to situate representative architectural and urban works within their historical and geographical contexts, and to interpret their meaning by understanding the circumstances of their creation. Most importantly, students will explore the relationship between the history of art and the political, economic, and social organization of societies.
Content Overview: Pharaonic Egypt – Hellenic Antiquity – The Roman World – Early Christian Transformation.

538CPHAS3 Philosophy and Reality of Living 2 Cr.

The objective of this course is to explore the architectural and philosophical dimensions of the concept of dwelling – a mirror of human thought, reflecting one's way of life, relationship to the environment, and connection to society.
The course analyzes Martin Heidegger's philosophy of dwelling, including the different dimensions of this concept (human being, world, space, and place), which for him are intrinsic to the human condition. Students will also be introduced to Gaston Bachelard's poetic vision of space, Le Corbusier's more functionalist perspective, as well as contemporary housing crises. These crises are presented as symptoms of deeper issues such as the standardization of architecture and the loss of meaning in dwelling – a concept too often reduced to the mere act of providing shelter.
Prerequisite: Societies, Culture and Way of Life (538CSMAS2)

538PHAAS5 Philosophy and Architecture 2 Cr.

This course offers a critical reading of the history of architecture through the lens of philosophy. It is structured around two main axes: the first explores Eastern, Greek, and Islamic architecture, while the second focuses on Western architectural thought, spanning the medieval, modern, and contemporary eras.
Course Objectives
This course aims to:
- Examine the impact of fundamental philosophical concepts on architectural theory and practice.
- Affirm the contribution of philosophy to addressing the challenges of the discipline of architecture.
- Focus on key philosophical notions such as space, place, finitude, infinity, form, and matter.
- Explore the intersection and mutual influence between aesthetic philosophy, art theory and criticism, and the practical commitments of artists.
- Engage with the contributions of major philosophers to architecture, such as Thales, Hegel, Heidegger, among others.

538CH3AS4 History of Architecture: From the Middle Ages to the Renaissance 4 Cr.

The objective of this course is to introduce students to the theological, ideological, and theoretical foundations that accompanied works of art and architecture from the Middle Ages through the Renaissance. The course seeks to develop students' ability to understand and use the vocabulary of art, architecture, and urbanism, and to identify and name the key stylistic characteristics typical of artistic, architectural, and urban production of the studied periods.
By the end of the course, students will be able to situate representative architectural and urban projects in time and space, interpret their meaning by placing them in historical and cultural context, and explain the intellectual, social, and political conditions of their production. Most importantly, students will learn to relate the history of art and architecture to the political, economic, and social organization of the societies that produced them.
Content Overview: Byzantium – Islamic Architecture – Romanesque – Gothic – Renaissance – Baroque and Rococo.

38CARAS6 Architecture and Religions 2 Cr.

This course offers an introduction to religious architecture, beginning with the Greco-Roman world. Understanding this period is essential to grasp its influence on other civilizations, notably Judeo-Christian and Islamic cultures.
The course explores:
The worship of Greco-Roman deities and their architectural manifestations.
The worship of the one God in the monotheistic religions: Judaism, Christianity, and Islam.
The sacred spaces, liturgical arrangements, and symbolic systems are characteristic of each religion.
Ultimately, this course serves as an initiation into a theology of architecture, allowing students to reflect on how faith, ritual, and space intertwine across cultures and epochs.

538CPLAS4 Lebanese Architectural Heritage and Surveys 4 Cr.

The objective of this course is to provide an overview of Lebanese architectural heritage, from vernacular traditions to domestic and public architecture, including palaces, religious edifices, and other building typologies. The course offers a critical analysis of the elements that constitute this heritage, their evolution over time and across cities and regions, their diverse sources of inspiration, and their terminology.
Special attention is given to the city as a place of density and transformation, tracing its evolution through different historical periods up to the modern movement. The course aims to equip students with a deep understanding of the richness and complexity of Lebanese architecture, fostering a sense of cultural identity and awareness of preservation challenges.
Content Overview: Vernacular Architecture – Traditional Architecture –Religious and Civic Architecture – 1930s –1940s – 1950s –1960s – Modern Movement.

538CH4AS5 History of Contemporary Architecture 4 Cr.

The objective of this course is to develop students' analytical and critical thinking in relation to the world in which they will build, and the new constraints that contemporary architecture must address. Contemporary architecture encompasses a wide range of challenges: climate change, energy efficiency, parametric and computational design, new materials, the star-architect phenomenon, urban gigantism, the roles of public and private stakeholders, and participatory modes of collaboration.
Content Overview: Ecological / Sustainable Architecture – Bioclimatic Architecture – High-Tech Architecture – Blob Architecture – Deconstructivism – Postmodernism – Critical Regionalism – "Gadget" Architecture – Bionic Architecture – Metabolist Architecture – Emergency Architecture – Futurist Architecture –.

538CBEAS5 Facing the Existing Building: Preservation, Restoration and Transformation 2 Cr.

This course aims to evaluate the various criteria used to assess existing buildings, to determine their value and significance, and to adopt the most appropriate approach when intervening with them. It provides an overview of possible technical strategies and their implementation and introduces the range of trades and disciplines involved – whether for conservation, adaptive reuse, or transformation – always with a focus on meeting contemporary standards of comfort and functionality.
Content Overview: Building Evaluation Criteria – Historic Buildings – Listed/Protected Buildings – Buildings with Collective Memory Value – Buildings for Recovery or Transformation – Restoration Techniques – Preservation Strategies – Adaptive Reuse and Rehabilitation.

538CAUAS5 Architecture and Urban Planning 4 Cr.

This course consists of introducing the conceptual and historical foundations, methods, and instruments of urban regulation in general and in Lebanon in particular. The objective is to initiate students to understand urban forms through a process of reasoned thinking.
This course comprises two parts:

1- The theoretical part consists of providing students with the necessary foundations to develop the ability to read an urban space. The course retraces the main strata of urbanization of different cities (medieval, modern, industrial, contemporary, etc.) to understand the logic used in the formation of the contemporary city.
2- The practical part aims to deal with data sources (quantitative methods: old and current topographical maps, statistics, thematic maps etc. / qualitative methods: direct observation, participant, survey etc.) suitable for the description and analysis of spaces.

This way, the course questions the challenges that arise for the future and development of the city (Lebanese context or others).
Content Overview: Elements of the morphological and functional analysis of the city.

064VALEL1 USJ Values in Daily Life 2 Cr.

The USJ Values in Daily Life course aims to raise students' awareness of the fundamental values of the Saint Joseph University of Beirut (USJ) to integrate them into their personal, interpersonal, and professional lives. It engages them in a critical reflection on how the values set forth in the USJ Charter can influence their behavior, actions, and decisions in addressing the challenges of the contemporary world.

538CAAAS3 Art and Architecture 2 Cr.

This course aims to explore the intersections and parallels between art and architecture. It encourages students to gain a deeper understanding of USJ's core values and to apply them in their daily lives, while examining the place of art within architecture and architecture as an art form in its own right – defined by ideas, forms, and symbols. Students will engage with architecture as an expression of cultural spirit, artistic creativity, and the human mind as a whole. Through interactive presentations and case studies of artworks from diverse historical periods and global contexts, the course fosters aesthetic sensitivity and critical thinking as essential components of architectural education.
Content Overview: Primitive Art – Antiquity – Middle Ages – Renaissance – Baroque – Classical – 19th Century – Contemporary Art.

538CPAAS6 Landscape and Architecture 2 Cr.

The objective of this course is to demonstrate the close relationship between architecture and landscape in the contemporary world. In the face of urban expansion encroaching upon natural landscapes, the concern for integration, protection, and planning has become an inherent part of contemporary architecture. Through the presentation of various projects adopting different approaches from around the world, students will benefit from an interactive course addressing an essential aspect of their education.
Content Overview:
Conservation and transformation of the landscape.
Architecture and new urban landscapes.
Projects dealing with sensitive landscapes.
Protection and planning of landscapes.
Experimentation through projects.
Prerequisite: History of Contemporary Architecture (538CH4AS5)

538CPCAS7 Analysis and Critical Thinking in Architecture 3 Cr.

This course introduces students to the field of architectural research and invites them to integrate research into the design process. Through the study of exemplary projects that demonstrate philosophical rigor, students are encouraged to think of architecture and urban design as tools serving humanity and society. The aim of the course is to assimilate the reasoning behind design and to acquire a sensitive understanding of architectural production, in order to develop a personal approach and position in response to the multiple contemporary expressions.

Content Overview:
The Architectural Process – Architectural Production – Space – Functionality – Form – Structure – Philosophy – The Poetic Dimension.
Prerequisite: Philosophy and Reality of Living (538CPHAS3)

538CTVAS7 Architecture, City and Territory: Contemporary Issues and Strategies 4 Cr.

The objective of this course is to consider the architectural project not as an end, but rather as an instrument that invites students to develop a multidisciplinary urban mindset and to grasp the issues that emerge from the study of the contemporary city, regardless of its scale. The course explores the methods and tools employed, the hybridization of knowledge, the contributions of the project to different phases of its development, and the advantages and limitations of such a learning process compared to others in the fields of planning and urbanism. It also encourages future designers to view the building from the perspective of the city's inhabitants and users.
Content Overview: The Building as an Object – The Urban Fabric – Networks – Users – Stakeholders – Partners – New Data.

538CSUAS6 Urban Sociology 2 Cr.

The objective of this course is to provide an overview of urban sociology, which seeks to understand the relationships of interaction and transformation between the forms of social organization and the forms of urban development. It includes social morphology, which is the study of the forms a society takes within space, as well as urban morphology, which is the study of the forms of the city – its housing, monuments, urban decor, and, more broadly, all its spatial arrangements. Together, these fields of knowledge help foster social life in existing cities and improve the design of new urban or architectural ensembles.

Sciences, Techniques and Environment

538SELAS1 Architecture Elements 3 Cr.

The course provides theoretical support for studio work. It aims to introduce the fundamental notions relating to the design of an architectural project, both abstract (concept, route, light, symbolism, scale, etc.) and physical.
Content Overview: Space – Measurements, Scale and Proportions – Light – Composition – Urban Spaces (the fabric/object relationship) – Openings – Circulation Elements.

538ST1AS1 Building Technology I: Notions 3 Cr.

The objective of this course is to provide an initial, comprehensive overview of the building and its constructive systems. On one hand, it is designed to familiarize students with building terminology and graphic conventions; on the other, it aims to introduce them to common construction elements and their configuration – from foundations to roofing – including interior works and the building envelope.
This course also offers a first look at the environmental challenges associated with buildings. Its purpose, along with the associated practical sessions, is to help students understand that construction elements are simultaneously the result of technical, cultural, regulatory, and environmental imperatives as well as architectural intentions – serving both as the support and the outcome of the architectural design process.

538ST2AS3 Building Technology II: Structural Work and Circulation 4 Cr.

The objective of this course is to introduce students to the systems, materials, and conventional methods of construction associated with the structural work (*gros œuvre*) of a building. Emphasis is placed on foundations and structural systems, with a focus on masonry, concrete, timber, and steel.
The course will also address vertical circulation systems, including their materials, construction techniques, and dimensional requirements: stairs, ramps, elevators, and other vertical access systems.
As with the other courses in this sequence, the aim – reinforced through associated practical sessions – is to foster an understanding that these construction elements result simultaneously from technical, cultural, regulatory, and environmental imperatives as well as architectural intentions. They are both the support and the product of architectural design.
Prerequisite: Building Technology I: Notions (538ST1AS1)

538ST3AS4 Building Technology III: Envelopes and Facades 4 Cr.

The objective of this course is to introduce students to the systems, materials, and conventional methods of construction related to the building envelope. Emphasis is placed on façade cladding, openings, window and door systems, roofs, and roofing assemblies.
As with the other courses in this sequence, the aim – reinforced through associated practical sessions – is to help students understand that these elements are simultaneously the product of technical, cultural, regulatory, and environmental imperatives and of architectural intentions. They serve both as the framework and as the outcome of the architectural design process.
Prerequisite: Building Technology I: Notions (538ST1AS1)

538ST4AS6 Building Technology IV: Interior and Finishes 4 Cr.

The objective of this course is to introduce students to the systems, materials, and conventional construction methods related to the interior of the building, focusing primarily on partitions, doors, and finishes for walls, floors, and ceilings.
The aim of this course, along with its associated practical sessions, is to help students understand that these elements are simultaneously the product of technical, cultural, regulatory, and environmental imperatives, as well as of architectural intentions. They are both the support and the outcome of architectural design.
Prerequisite: Building Technology I: Notions (538ST1AS1)

538SMAAS1 Architecture Applied Mathematics I 4 Cr.

The purpose of this course is to provide students with a set of mathematical tools enabling them to evaluate, measure, and quantify the built reality of architecture. This course consists of theoretical concepts (without formal proofs) designed to structure the students' thinking and develop their capacity for abstraction, combined with direct application exercises and architectural applications.
Upon completion of this course, students will be able to:
Describe a phenomenon using single- or multivariable functions.
Analyze and study curves by calculating limits and derivatives and interpreting their variations.
Perform single and double integral calculations of functions over a given interval.
Work with parametric curves to model and analyze complex architectural forms.

538SMAAS3 Architecture Applied Mathematics II 3 Cr

This course introduces students to the use of mathematical tools to solve practical problems in architecture. The concepts covered include conic sections, parametric curves, complex volumetry, and numerical series.
The course is structured with a minimum amount of theoretical background (without formal proofs) followed by direct application exercises. Emphasis is placed on illustrations and case studies drawn from architecture, allowing students to directly practice and experience how mathematics can be used to model, analyze, and optimize architectural forms and spatial configurations.
Prerequisite: Architecture Applied Mathematics I (538SMAAS1).

538SS1AS2 Art of Structures 3 Cr.

The objective of this course is to introduce students to the fundamentals of load-bearing structures and their analysis. It presents the main types of simple architectural structures, the basic principles of structural behavior, and the methods for determining the internal forces acting on them.
Students will also be introduced to the principles of structural dimensioning and the resolution of forces through graphical statics, enabling them to understand how loads are transmitted and distributed within a structure.

538SSTAS3 Static 2Cr.

This course introduces the fundamental concepts for understanding the mechanical behavior of load-bearing structures through the study of statics. Students will analyze and calculate simple structures, focusing on loads, internal forces, and deformations.
Applications will include structural systems in concrete, wood, and steel, enabling students to understand how different materials respond to various stresses and to develop an ability to evaluate structural stability and performance.
Prerequisites: Art of Structures (538SS1AS2).

538SRMAS4 Strength of Materials 4 Cr.

This course introduces students to the fundamental principles of mechanics of materials, focusing on the behavior of load-bearing structures. It covers the analysis and calculation of simple structural systems subjected to loads, internal forces, and deformations.
Through theoretical explanations and practical applications, students will explore structural behavior in concrete, timber, and steel systems, learning to determine stress, strain, and deflection, and to understand their implications for safe and efficient design.
Prerequisite: Static (538SSTAS3)

538SS3AS5 Structural Design: Bases and Reinforced Concrete 4 Cr.

The objective of this course is to continue the study of structural analysis and design using Eurocodes, with a particular focus on:
Permanent and variable loads
Load combinations and actions.
Structural effects and serviceability states
Ultimate limit states
The course also introduces the principles of reinforced concrete design, emphasizing the structural logic of a building. Students will learn to perform a global load path analysis (load transfer and load descent) from roof to foundation, preparing them for advanced structural design courses.
Prerequisite: Strength of Materials (538SRMAS4)

538SS4AS7 Structural Design: Structural Systems and Frameworks 4 Cr.

The objective of this course is twofold:
To deepen structural knowledge by introducing the fundamentals of soil mechanics, foundations, retaining structures, and seismic loads.
To develop the ability to design complex structures in direct relation to architectural design, enabling students to recognize and address the challenges posed by such structures. This will help them make coherent and rational choices that strengthen and enhance the architectural project.
The course also exposes students to iconic structural typologies throughout architectural history, allowing them to explore their physical behavior and the implications of their complexity.
Prerequisite: Structural Design: Bases and Reinforced Concrete (538SS3AS5)

538SPBAS2 Building Physics 2 Cr.

The objective of this course is to provide students with foundational knowledge in the field of building physics.
Thermal Fundamentals: The course begins with basic thermal concepts, including the physics of building envelopes, indoor hygrothermal comfort, and air quality. Students are introduced to the principles of heat and moisture transfer, both through ventilation and within building walls, to understand the determinants of indoor thermal comfort.
Building Acoustics: The second part addresses the fundamentals of building acoustics, including the nature and measurement of the acoustic field, sound propagation, and acoustic requirements related to both geometrical and wave phenomena.
Photometry and Colorimetry: The third part introduces students to the basics of photometry and colorimetry, enabling them to consider light quality and color as design parameters.

538SECAS4 Equipment and Comfort 4 Cr.

The objective of this course is to approach, in a design and integration orientation, the architectural and technological measures linked to the quality of the atmospheres at the level of visual comfort with natural and artificial lighting, of acoustic comfort with acoustic correction and insulation, of thermal comfort with heating and cooling techniques, and of air quality with ventilation techniques. The goal is to integrate them into the project design process in a climatic, regulatory and environmental context, to understand and describe the role and operation of the systems, and to use the usual pre-sizing rules for installations.
Prerequisite: Building Physics (538SPBAS2)

538SEFAS8 Equipment and Flows 4 Cr.

The objective of this course is to approach, from a design and integration perspective, the architectural and technological measures related to the quality of environments, focusing on visual comfort with natural and artificial lighting, acoustic comfort with correction and sound insulation, thermal comfort through heating and cooling techniques, as well as air quality through ventilation methods. The goal is to enable students to integrate these aspects into the design process within a climatic, regulatory, and environmental context, to understand and describe the role and operation of these systems, and to apply the common rules for the pre-sizing of installations.
Prerequisite: Building Physics (538SPBAS2)

538SE1AS6 Climate, Ecology and Architecture 4 Cr.

The objective of this course is to address the challenges and principles of sustainable development and bioclimatic building design. It emphasizes the transversality of sustainability issues, aiming to synthesize knowledge related to sites, climate, building systems, technologies, and materials.
Through case studies and hands-on experimentation, students will explore how to move from concepts to effective implementation within an architectural project. The course highlights the integration of environmental, technological, and material considerations into a coherent design process, preparing students to develop projects that are both contextually responsive and environmentally responsible.

538SE2AS9 Environmental Certification 2 Cr.

The objective of this course is to introduce students to the various environmental certification systems currently used in the region, such as LEED, BREEAM, HQE, and ARZ, and to explore their application through case studies.
The course also aims to highlight the economic and financial benefits of adopting an environmentally responsible approach – including brand differentiation, access to special financing schemes, reduced consumption costs, enhanced construction quality, and measurable return on investment.
Prerequisite: Climate, Ecology and Architecture (538SE1AS6)

538SSIAS8 Fire Safety 2 Cr.

This course aims to introduce students to the fundamental principles of fire safety. It is an essential component of architectural education, as building design must account for fire safety standards and principles to ensure the protection of occupants and property in the event of a fire.
The objective is to provide students with the foundational knowledge necessary to integrate fire safety solutions into their construction projects, thereby contributing to the safety and protection of building occupants.

Professional Practice

538GDCAS6 Construction and Real Estate Law 4 Cr.

The objective of this course is threefold:
General Legal Concepts
To introduce students to the fundamentals of public and private law relevant to the architectural profession, including real estate, urban planning, property ownership, condominium law, and public procurement.
Lebanese Construction Law
To explain the principles and details of the Lebanese Construction Law, which governs urban planning rules relating to the form, height, footprint, and surface area of buildings.
Technical Standards and Regulations
To present the technical norms and regulations applicable to building design and construction, including fire safety, accessibility for persons with disabilities, security requirements, and DTU (*Documents Techniques Unifiés*) standards.

538GPRAS8 Professional Practice and Ethics 2 Cr.

The objective of this course is to introduce students to the missions and responsibilities of the architect, with a particular focus on project management (*maîtrise d'œuvre*) in all its phases from conceptual design to project delivery.

The course covers:
Project Phases: Design, development, construction documentation, tendering, execution, and delivery.
Roles and Legal Responsibilities: Duties of the architect, legal liabilities, and obligations.
Project Stakeholders: Identification of all participants in a project (clients, contractors, consultants) and their respective roles.
Contracts and Permits: Structure of project management contracts, the role of the national professional order (*Ordre des Architects*), internal procedures, and the process for preparing and submitting a building permit application.
Architecture Practice Management: Basic introduction to running an architectural office, including company structures, client relations, accounting and fiscal obligations, team management, and collaboration practices.
The course also emphasizes professional ethics and deontology, encouraging students to integrate ethical considerations into their practice and decision-making.

538GMPAS9 Project Management 4 Cr.

The objective of this course is to provide basic project management tools both in the study phase and the construction phase. The goal is to familiarize students with task and resource planning, specifications, measurements, contractual documents as well as budget estimation and cost management.

538GSPAS7 Professional Internship 3 Cr.

This summer internship, lasting a minimum of 8 weeks, should allow students to have their first work experience in the professional world, such as architecture agencies or design offices. It will be the subject of a report and a presentation.

538ANGAS8 English 4 Cr.

This course allows students to have sufficient linguistic knowledge in scientific English.

538ETAAS5 Ethics and Architecture 4 Cr.

This course addresses bioethics, expanding its scope to include broader social and collective issues. It aims to equip students with practical skills for ethical decision-making, communication, and conflict resolution.
In addition, it introduces students to the principles of professional ethics in engineering, focusing on the responsibilities of engineers toward one another and toward the national engineering association (*Ordre des Ingénieurs*).
Course Content
Key Concepts: Ethics, morality, deontology, law, human rights, conscience, freedom
Plurality of Ethics: Cultural differences, value-based ethics, ethics and spirituality, ethics and religion
Contemporary Ethical Issues (Individual): Bioethics in the 21st century
Contemporary Ethical Issues (Society): Social, political, economic, and entrepreneurial ethics; relations among engineers; relations with the national engineering association.

538TECAS0 Communication Skills 4 Cr.

This course aims to provide students with practical skills applicable both in their personal and professional lives. It focuses on improving oral, written, and non-verbal communication skills, enabling students to clearly and effectively communicate. The course also addresses the ability to adapt communication to specific contexts while exploring the fundamental concepts of communication.

538RPEAS3 Photographing Space 3 Cr.

The aim of this course is to introduce students to the concepts and practices of photography, fostering their ability to develop a refined visual sensibility. Students are introduced to the history of analog photography while gaining hands-on experience with basic techniques of digital photography, both in black-and-white and color.
Whenever possible, the course will include darkroom practice to provide students with a comprehensive understanding of photographic processes. A special emphasis is placed on architectural photography, including the representation of buildings, sites, materials, and landscapes.
Additionally, the course covers basic digital photo-editing tools and offers an introduction to videography, enabling students to experiment with visual storytelling and explore the relationship between still and moving images.

Elective Courses:

538CAIAS9 Interior Architecture 2 Cr.

This course invites students to develop a well-researched concept for designing interior spaces in a functional and aesthetic manner, through the study of various small-scale projects (up to 120 m^2): residential (chalet, studio, etc.), commercial (point of sale, offices, etc.), or touristic (restaurants, etc.). The concept development relies on a working methodology based on research and readings. The deductions resulting from the analysis enable the student to find appropriate solutions and a suitable atmosphere for the project. Intellectual curiosity and analytical thinking stimulate the student's imagination. They allow the student to conceive new ideas and find solutions that address the given challenges. This approach ensures the integration of functional and aesthetic aspects adapted to the needs and requirements of future users.

538CAEAS3 Art and Space: Exhibition Practices 2 Cr.

This elective artistic expression workshop invites architecture students to explore and experiment with various artistic media, such as photography, video, sculpture, and installations, while addressing contemporary and contextual themes related to architecture and urbanism. The objective is to enable participants to develop a complete artistic project that they will exhibit at the end of the workshop.

538CURAS9 Urban Planning Workshop 4 Cr.

The course will introduce students to the stages of urban projects and strategic planning, as well as urban planning tools through the study of real international case studies. Students will be confronted with real situations where they will learn participatory planning, community engagement, and social and environmental responsibility. They will work within real constraints while being exposed to global perspectives on urbanism.

538SAMAS4 Materials and Making Workshop 2 Cr.

This immersive workshop offers architecture students a hands-on approach to materials and manufacturing techniques. Through practical sessions in woodworking, welding, and other artisanal skills, participants will explore the implementation of materials – from technical gestures to the construction of architectural elements. The objective is to develop a sensitivity to materials, an understanding of joinery, and proficiency with tools, while fostering creativity and experimentation.

538CBSAS0 Sublime Beirut 2 Cr.

This course explores the notion of the "sublime" through the urban landscape of Beirut, harnessing the potential of artificial intelligence. Ruins, remnants overgrown with vegetation, and unfinished structures – witnesses of an aesthetic where memory, resilience, and the immeasurable intertwine – offer an ideal setting for this experimental work. These emerging technologies will serve as tools for exploration and storytelling, enabling the creation of dreamlike and speculative visual narratives, and it is urgent to take ownership of them. In parallel, the course aims to raise students' awareness of an interdisciplinary, ethical, and responsible use of AI. By combining meaning, innovation, and transdisciplinarity, students will develop a critical perspective on these tools while producing a short immersive film of approximately two minutes, rooted in Beirut's urban imaginaries.

538CDDAS7 Last Dwellings 4 Cr.

(Title borrowed from the work of Robert Auzelle)
The question of funerary architecture, burial practices, and their landscape integration into the world of living is inseparably linked to the beliefs and mourning processes that underlie them. In the great civilizations that preceded us, while constructions intended for daily life were often made with perishable materials, those dedicated to the deceased and the preservation of their memory benefited from more elaborate and durable designs. This concern for permanence reflected a desire to perpetuate the memory of the departed beyond time, to ensure the transition toward an "afterworld" – a place of refuge for the soul – thereby inscribing their existence within the historical and cultural continuity of their society.
This seminar offers both a historical and anthropological journey, exploring funerary forms through the ages. It examines the multiple relationships between these practices and the surrounding cultural customs, as well as how they architecturally transfigure metaphysical concepts unique to each culture. It also aims to reflect on their

relationship with the grieving process and the echo left by the deceased in the memory of the living.
The seminar seeks to provide participants with the conceptual and analytical tools necessary to understand the architectural, urban, landscape, and anthropological dimensions of funerary spaces, whether located in urban or rural environments. By encouraging critical reflection on the design of these spaces within specific cultural contexts, whether Lebanese or otherwise, the seminar also explores their relevance and evolution in the contemporary context.

538RDDAS0 Developed Digital Tools 2 Cr.

This course offers an in-depth exploration of the UNITY software, focusing on its application in the field of architecture. Students will learn how to use UNITY as a powerful tool for interactive visualization, three-dimensional modeling, and virtual environment creation. The course aims to develop specific technical skills while integrating architectural creativity.

538PRUAS0 Prospective Urbanism 2 Cr.

Through case studies, students discover examples of success and failure in urban foresight. In doing so, they become familiar with the fundamental concepts of prospective urbanism and various planning methodologies. Through hands-on exercises based on real-world projects, students explore key issues in urban studies, identify the challenges and constraints specific to the urban situations under consideration, and then apply their newly acquired knowledge by developing scenarios.
Content Overview: Challenges – Issues – Planning – Environment – Society – Urban Space – Development.

538CANAS7 "Anarchiteture" 4 Cr.

This elective course re-examines the notion of "anarchitecture" by updating it within the context of artificial intelligence. Inheriting the radical gestures of Gordon Matta-Clark – who transformed built structures into critical material through cuts and voids – anarchitecture established itself as a practice of constructive disobedience. It questions architecture at the point where it fractures or decomposes, revealing its social, political, and poetic tensions.
Through their capacity to hybridize opposites and generate unpredictable visual outcomes, artificial intelligence tools extend this theoretical inquiry. As instruments of disruption and speculation, they produce experimental, subversive, and deconstructed architectural narratives. By engaging with these tools, students will be invited to subvert, fracture, and recombine the hierarchical normality of our built environment, generating speculative worlds where architecture reinvents itself through accident, deviation, and the unforeseen.
At the same time, the course aims to cultivate a critical and reflective approach to AI use, within a society where the acceleration of media flows and social networks contributes to the dissolution of the material world and its recomposition within an unstable digital realm. Architecture – deprived of its constructive and tectonic essence – becomes image, simulacrum, and narrative. The final short film, developed from generated imagery, thus stands as the testimony of a reimagined anarchitecture, oscillating between physical collapse and artificial mutation.

538CURFS7 Urban Foresight 2 Cr.

The Urban Foresight course aims to develop an understanding of future urban dynamics. Through case studies, students examine examples of both successful and unsuccessful urban foresight initiatives. In doing so, they become familiar with the fundamental concepts and various methodologies of urban planning.
Through practical exercises based on real projects, students explore key issues in urban studies, identify challenges and constraints specific to projected urban situations, and apply their newly acquired knowledge to the development of scenarios.
Content Overview: Challenges – Issues – Planning – Environment – Society – Urban Space – Development.