

Undergraduate Catalogue 2017

Faculty of

FACULTY OF ARCHITECTURE

Design & Built Environment

Faculty Administration

Dean	Prof. Dr. Ibtihal El-Bastawissi
Assistant Dean	Dr. Marwan Halabi
Director–Tripoli Branch	Dr. Nabil Mouhareb
Design Programs Coordinator	Dr. Hisham El-Arnaouty
Executive Administrator	Mrs. Nivine Jaleddine

Academic Staff

Professors	Prof. Dr. Ibtihal El-Bastawissi, Prof. Ayman Afifi
Associate Professors	Dr. Nader Azab, Dr. Nabil Mohareb, Dr. Hisham El-Arnaouty Dr. Baher Farhat
Assistant Professors	Dr. Sawsan Saridar, Dr. Kareem Galal, Dr. Mohamad Sobhy Dr. Samer El-Sayary, Dr. Marwan Halabi, Dr. Oussama Omar Dr. Maged Youssef, Dr. Shady Khoury, Dr. Massimiliano Gotti Dr. Nael El Sarrag, Dr. Mostafa Hefnawi, Dr. Mary Felix, Dr. Eslam Samahi Dr. Mostafa Khalifa, Dr. Ali Sedki Yassin, Dr. Khaled Daghar.
Senior Lecturers	Mr. Khaled Sadek, Ms. Hiba Mohsen, Ms. Lara Balaa, Ms. Rasha Sukkarieh
Part-time Lecturers	Dr. Said Jazairy, Dr. Mohamad Saidi, Dr. Mohamad Yassine Mr. Abdel Razzak Balaa, Dr. Adnan Khoja, Mr. Saleh Rifai Mr. Rabee Shbaro, Ms. Farah El-Zein, Ms. Therese Yared Mr. Tarek Khoury, Mrs. Ibtissam Rifai, Mr. Ahmad Al-Houseini Mr. Jalal Abs, Ms. Hala Abi Haidar, Mr. Nizar Kassem, Mr. Tarek Al-Soufi Mr. Wafic Ajam, Mr. Majdi Makieh, Dr. Amer Jarad, Mr. Mohamad Negro Mr. Fawzi Traboulsi, Ms. Amal Iali, Mr. Nabil Hamed, Ms. Rita Teno Asmar Mr. Ahmad Aksamawati Arja, Ms. Bahia Jamal, Ms. Balsam Abou Chakra.

History

The Faculty of Architecture- Design & Built Environment was founded in 1962 as the fourth faculty at BAU. Since commencement, it has played a key role in addressing & serving the needs of students from Lebanon & the entire Middle East. The Faculty started with 36 students in 1962 prospering to a total of 786 students in 2016, at various levels of Architecture program in Debbieh & Tripoli Campuses.

The Faculty was initially located at the main building in Beirut campus. However, in 1987 & in order to accommodate the increasing number of students & facilities, it moved to the now labeled “Hariri Building” & occupied the top four floors. It remained there until October 2006 when it became the first BAU faculty to reside in the newly established Debbieh campus in the Shouf District in line with the University’s expansion plans. Moreover, the Faculty has expanded to Tripoli Campus since 2010 & now it hosts around 206 students.

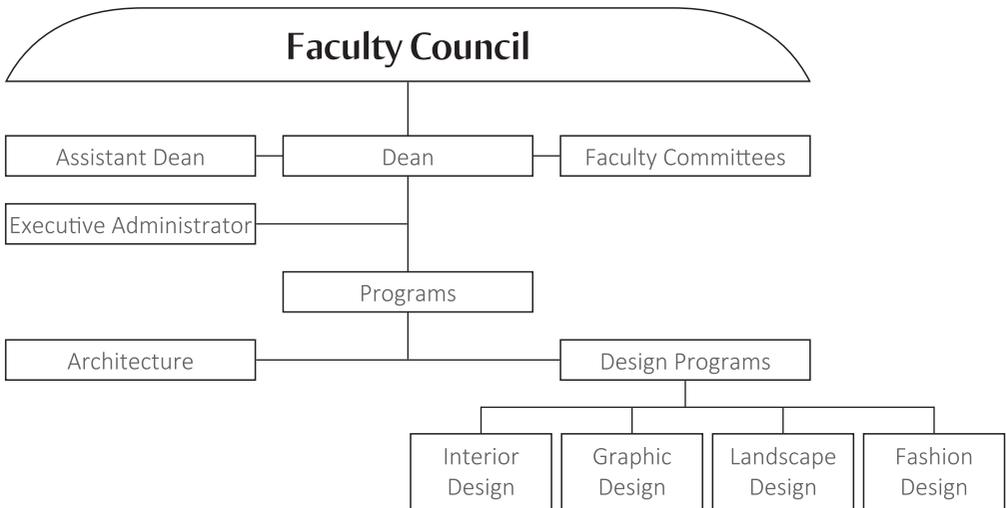
The Faculty constantly updates its programs & associated structure, & offers new programs responding to the community needs & job market. In 2005, the Faculty implemented the Credit

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Hour System, instead of the two academic terms scheme, thereby offering students a more adaptable & responsive program spreading over a ten-semester period (minimum) for the program of Architecture. Lately, the Faculty has launched new 3-year programs in Design at Debbieh & Tripoli Campuses; the programs of Interior Design, Graphic Design & Landscape Design were firstly offered in Fall 2014/2015, & in Fall 2016/2017 the Fashion Design program has been also introduced. Today, the number of students registered in these programs is 117 students in Debbieh Campus & 32 students in Tripoli Campus.

In June 2012, the 5-year Bachelor program in Architecture has been awarded unconditional validation for RIBA Part 1.

Organizational structure



Vision

The vision of the Faculty of Architecture- Design & Built Environment is to foster a challenging learning environment & to continually compete as well as lead advances in architectural education, in order to prepare innovative, critical & industrious graduates able to improve, through their future careers, the quality of the built environment.

Mission

Consistent with the University strategy, the Faculty of Architecture- Design & Built Environment is committed to delivering a professional architectural education necessary for those seeking to enter the architectural practice. The Faculty's academic mission is to further develop the discipline & practice of architecture through a seamless program of undergraduate & postgraduate studies respecting individualism & diversity, & fostering for creativity & rationalism in design & construction process. The Faculty seeks to educate diligent architects who practice their career in a responsive manner towards the society, culture & environment at the local, regional & international level.

Academic Programs

The Faculty offers a Bachelor of Architecture Degree where the standard duration of study is 10 semesters, as well as Bachelor degrees in Design programs including interior design, graphic design, landscape design, & fashion design where the duration of study is six semesters.

I-ARCHITECTURE

Objectives

The teaching of Architecture employs a progressive strategy to achieve the following broad objectives:

- To create & maintain a positive educational environment that promotes learning & personal development;
- To deliver high-quality architectural education, through a developed curriculum & syllabus with inherent flexibility & freedom of selecting different fields of specialization;
- To adopt progressive learning methods which lead to developed knowledge & acquired skills, ensured through adequate delivery & testing processes at each stage of study;
- To provide students with a comprehensive basis of awareness, knowledge, understanding, & aptitude, through covering a wide spectrum of theoretical & practical studies in such fields as Environment, Art, Culture, Technology, Sociology, & Economy; and
- To implement an ongoing process of monitoring & development of performance, driven by the emphasis on future developments, within the domain of architecture as well as related disciplines.

Admission Requirements

To be accepted for an undergraduate degree, applicants must:

- Hold the official Lebanese Secondary School Certificate in a branch relevant to the chosen undergraduate field of specialization, or an official equivalent;
- Successfully pass an entrance exam to measure the level of proficiency in English Language (or provide evidence of English Language abilities such as TOEFL, ILETS...), & an aptitude test (thinking skills, technical & architectural skills), as well as attend a Personal Interview.

Learning Outcomes

The Faculty offers the Bachelor Degree in Architecture in a five-year cumulative program (10 semesters). After the fifth year, the undergraduate student is a qualified architect & eligible to practice professionally with the following abilities & skills:

- Full understanding of all architectural & engineering concepts & practices.
- Knowledge of the evolving nature of the profession, & the rapidly changing conditions in which architects currently practice, & in which the traditional expertise, capacities & authority are increasingly being challenged.
- Understanding of modern & contemporary architectural theories that explain the latest philosophies by well-known architects & the local architecture in order to preserve the local identity.
- Use of several skills, necessary to their professional practice like: career development, continuing education & life learning, multi-disciplinary & inter-disciplinary tasks (esp. administration & operation management); marketing: exploring contextual dynamics & micro-economics

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complementary activities & ancillary duties, technological awareness, self-driven training & capabilities, engineering & development of new materials, computer software, construction methods, resource efficiency, sharing & transfer of technologies, & heritage management: formulation of policies & practicable approaches.

Career Opportunities

Many graduates will take up a career in private practice or government. Many become specialists in heritage, sustainable design or commercial projects. However, because an architect's skills & training are so broad, there are also many opportunities outside the mainstream of architectural practice. An architect may practice:

Architectural design; Development of execution drawings; Project management; Construction management; Site supervision; Interior design; Building renovation; Urban planning, Urban design & Landscaping.

Graduation Requirements

Program	* University Requirements + ICDL		Program Requirements		Total Credit Hours
	Mandatory Courses	Elective Courses	Major Core Courses	Free & Major Elective Courses	
ARCH	5	7	Design studios, essential theoretical & technical requirements, execution design & building technology courses, & courses in Architectural Engineering (136 Crs.)	- 200 Level courses: 4 Crs. - 300 Level courses: 6 Crs. - 400 Level courses: 6 Crs. - 500 Level courses: 6 Crs. (22 Crs.)	170
ARCH: Architecture					

* A total of 12 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Cr.), ENGL 001 (2Cr.), BLAW 001 (1Cr.) & another 7 credits are selected from the University Elective Courses list + ICDL.

Program Overview

The undergraduate curriculum for the degree of Bachelor in Architecture consists of 170 credit hours + ICDL. However, University Requirements have a total of 12 credits which leaves 158 credits for Architecture courses. Architecture courses thus form a total of 93% of the required courses for graduation.

The total credit hours of design studio & supporting courses are 118 out of 158, thus constituting 75% of the total Architecture credit hours. This total number of design studio credit hours is formed of Design Studio Courses.

Design Supporting Courses are calculated in different percentages according to their effective relevance to design studio courses.

Major Core Courses

Courses			Crs.	Pre-Co/requisites
ARCH	271*	Architectural Design Fundamentals: Visual Studies	6	
ARCH	272*	Architectural Design Fundamentals: Physical Studies	5	Pre: ARCH271
ARCH	273*	Building Construction I	2	
ARCH	274*	Building Construction II	3	Pre: ARCH273
ARCH	275	History of Architecture I	2	
ARCH	276	Theory of Architecture I	2	
ARCH	277	CAD Drawing	2	
ARCH	278	Computer Graphics	2	Pre: ARCH277
ARCH	279	Architectural Sketching	2	
ARCH	280	Academic Writing	2	
ARCH	291*	Architectural Design I	5	Pre:ARCH272
ARCH	292*	Architectural Design II	5	Pre: ARCH291
ARCH	293*	Building Construction III	3	Pre: ARCH274
ARCH	294*	Building Construction IV	3	Pre: ARCH293
ARCH	295	History of Architecture II	2	
ARCH	296	Theory of Architecture II	2	
ARCH	297	Theory of Colors	2	
ARCH	298	Indoor Environmental Control	2	
CVEE	231	Theory of Structures for Architects	2	
CVEE	232	Concrete & Steel Structures	2	
ARCH	331*	Architectural Design III	5	Pre: ARCH292
ARCH	332*	Architectural Design IV	5	Pre: ARCH331
ARCH	333*	Execution Design I	3	Pre: ARCH294
ARCH	334*	Execution Design II	3	Pre: ARCH333
ARCH	335	History of Architecture III	2	
ARCH	336	Theory of Architecture III	2	
ARCH	337	Interior Design	2	
ARCH	338	City & Town Planning	2	

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ARCH	339	Environmental Design	2	
MECH	431	HVAC & Sanitation for Architects	2	
ARCH	431*	Architectural Design V	5	Pre: ARCH332
ARCH	432*	Architectural Design VI	5	Pre: ARCH431
ARCH	433*	Execution Design III	3	Pre:ARCH334
ARCH	434*	Execution Design IV	3	Pre: ARCH433
ARCH	435	Urban Design	2	
ARCH	436	Research & Programming	2	
ARCH	437	Project Management	2	
ARCH	438	Specifications & Quantities	2	
CVEE	331	Soil Mechanics & Foundations, & Material Properties & Testing	2	
CVEE	332	Surveying for Architects	2	
ARCH	533	Architectural Criticism	2	
ARCH	534	Graduation Thesis	2	
ARCH	535	Building Regulations & Professional Practice	2	
ARCH	536	Design & Building Economics	2	
ARCH	537	Architectural Design VII	5	Pre: ARCH432
ARCH	539	Project Programming	3	Pre: ARCH432
ARCH	540	Senior Project	8	Pre: ARCH434, ARCH537, ARCH539.
ARCH	541	Architecture Internship	0	

* These core modules are separated & independently graded courses. Students failing the first module (Fall Sem.) is not allowed to register in the second one (Spring Sem.).

Description of Major Core Course

ARCH271 ARCHITECTURAL DESIGN FUNDAMENTALS

VISUAL STUDIES (6Cr.: 2Lec, 8Stu): Introductory course including fundamentals of architectural drafting techniques, two dimensional representation, & orthographic projections. Studies of artistic expression & inventive composition. Principles & rules of visual composition. Vocabulary of visual composition, relationships & aesthetics. Experimentation, diverse tools & materials used to visually interpret artwork & design concepts. Practical considerations & applications.

ARCH272 ARCHITECTURAL DESIGN FUNDAMENTALS: PHYSICAL STUDIES (5Cr.: 0Lec, 10Stu)

Series of Exercises leading to the development of manual drawing & delineation skills. Study of human activity, dimensions of human figure & ergonomic as means of designing usable space. Representation of building elements in plans, elevations

& sections. Projection techniques for shade shadow construction. 3 Dimensional drawings of building interior & exterior. Applications leading to the understanding of model types, materials & techniques of preparation. Managing different types of models & levels of detailing. Prerequisite: ARCH271.

ARCH273 BUILDING CONSTRUCTION I (2Cr.: 1Lec, 2Stu)

The basic building construction materials including bricks, masonry, lime, cement, mortar & concrete. Study of structural systems & their major elements: structural frame, exterior & interior bearing walls, nonbearing walls & partitions, & floor & roof assemblies. General fundamentals site preparation, foundation types & selection.

ARCH274 BUILDING CONSTRUCTION II (3Cr.: 1Lec, 4Stu)

Further developing knowledge about the fundamentals & preliminary principles of reinforced concrete & steel construction. Review of typical building elements & special treatments within buildings including: structural joints, damp proofing, thermal insulation & fire protection. Prerequisite: ARCH273.

ARCH275 HISTORY OF ARCHITECTURE I (2Cr.: 2Lec)

Core module of history of art & architecture in various civilizations, including Pre-historic, Ancient Egyptian, Mesopotamian (Assyrian & Babylonian), Greek & Roman. Different approaches to the presentation of history: Visual images, cultural material, & text-based communication.

ARCH276 THEORY OF ARCHITECTURE I (2Cr.: 2Lec)

Introduction to basic design theories & strategies related to the development of spatial concepts in architectural design, including composition, color, form, relationship of elements, & development of 2-D & 3-D design projects. More emphasis on concept generation & evaluation.

ARCH277 CAD DRAWING (2Cr.: 1Lec, 2Lab)

Basic computer aided drafting skills using the latest release of CAD software including: file management, Cartesian coordinate system, drawing set-ups, drawing aids, layer usage, drawing 2D geometric shapes, editing objects, array, text applications, dimensions & dimension variables, paper space & viewports, templates, external references, & printing/plotting. 3D AutoCAD features & commands including: wireframe construction, surface modeling, solid modeling, extrusions, Boolean operations, 3D editing, & 3D views.

ARCH278 COMPUTER GRAPHICS (2Cr.: 1Lec, 2Lab)

PhotoShop application for architectural rendering & the creation, modification & manipulation of images. SketchUp modeling for the conceptual phases of design. 3D rendering & animation using AUTODESK 3D Studio software. Emphasis on 3D geometry, texture mapping, lighting, camera placement, shading, photo-realistic rendering, animation techniques, & walk through animations. Prerequisite: ARCH277.

ARCH279 - ARCHITECTURAL SKETCHING (2Cr.: 0Lec, 4Stu)

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Developing graphic language by which an architect explains buildings & other objects using a range of fundamental drawing skills & media. Exercises in freehand representational drawing using charcoal, graphite, & conte crayon with emphasis on line, proportion, values, & composition. Portfolio of drawings based on observation of the physical world, in particular the built world. Studies progress from geometric to non-geometric forms.

ARCH280 ACADEMIC WRITING (2Cr.: 2Lec)

Methods & tools needed to prepare academic & professional documents are reviewed. Basic knowledge about various steps, stages, & process of production of complete research papers & technical reports, the principles of writing, standards, requisites, considerations, phases, & subject-related requirements. The final assessment in this course is to be carried out internally (e.g. oral discussion and/or within exam).

ARCH291 ARCHITECTURAL DESIGN I (5 Cr.: 0Lec, 10Stu)

Fundamentals of Architectural Design Process. Design projects requiring theoretically informed & practically viable architectural design solutions. Designs in response to specific aims including modular design, architectural space grouping, articulation of spaces & functional relationships. Prerequisite: ARCH272.

ARCH292 ARCHITECTURAL DESIGN II (5Cr.: 0Lec, 10Stu)

Design projects leading to the development of Design Process starting from the site analysis. Detailed knowledge of different aspects of design presented & evaluated both graphically & orally. Portfolio of designs in response to specific aims comprising the study of outer & inner spaces relationship, building & site relationship, & landscaping. Contextual design reflecting environmental, social & cultural imperatives. Prerequisite: ARCH291.

ARCH293 BUILDING CONSTRUCTION III (3Cr.: 1Lec, 4Stu)

Review of various systems of floor, wall, & roof including the study of structural properties, & construction techniques & materials. Indoor finishing materials & development of finishing schedule. Exercise based class simulating the understanding of construction including analysis & applications of standards, relationships, & material review & selection. Development of construction drawings & detailing. Prerequisite: ARCH274.

ARCH294 BUILDING CONSTRUCTION IV (3Cr.: 1Lec, 4Stu)

Materials & techniques for internal & external finishes including internal partitions, openings, façade systems (curtain walls, double skin façade, etc.). Types & details of skylights. Landscape detailing & street furniture. Analysis & applications of standards, material review & selection. Development of construction drawings & detailing. Prerequisite: ARCH293.

ARCH295 HISTORY OF ARCHITECTURE II (2Cr.: 2Lec)

Study & review of Early Christian architecture, Byzantine architecture, Medieval architecture, Romanesque & Gothic architecture, & Renaissance architecture in Europe through 15th & 16th Centuries.

ARCH296 THEORY OF ARCHITECTURE II (2Cr.: 2Lec)

This course explores the form, space & scale: form defining space, qualities of architectural space, articulation & organization of form & space, circulation elements & building approaches. It investigates the intentions in architecture: design process, architectural concept & unity. It also reviews the principles of aesthetics: vocabulary of architectural compositions, visual & aesthetic relationships. The course includes analysis of design principles & their applications in various architectural examples.

ARCH297 THEORY OF COLORS (2Cr.: 1Lec, 2Stu)

Color theories including a variety of concepts, as well as many practical uses of color within architecture. Color Aspects: psychology of visual perception, human response to visual imagery & communication using color. Designer's Methods to develop & best utilize color within environments. Informed application of practical color theory principles to student projects selecting colors wisely & deliberately.

ARCH298 INDOOR ENVIRONMENTAL CONTROLS (2Cr.: 2Lec)

Principles of lighting (daylight & artificial) in buildings, Reducing noise & enhancing sound for communication. Regulating heat transfer for occupant thermal comfort. Description of passive means for environmental control, including presentation of scientific explanations & design guidelines for utilizing these means. Design guidelines for use in the preliminary schematic design phase.

CVEE231 THEORY OF STRUCTURES FOR ARCHITECTS (2Cr.: 1Lec, 2Tut)

Theory & concepts of structures to emphasize an intuitive comprehension of the fundamental principles of structural behavior including loading, shear & bending moments. Calculation of internal forces in simple structures such as cantilevers, simple beams, & overhanging beams. Calculation of internal forces in truss members.

CVEE232 CONCRETE & STEEL STRUCTURES (2Cr.: 1Lec, 2Tut)

Combined Course addressing two technical fields:
Review of concrete & steel structure systems. Reinforced concrete fundamentals reviewing basics of reinforced concrete behavior & introducing methods of design used in current engineering practice. Basic mechanics of structural concrete introduced in examining bending, shear, & axial forces. Topic areas including beams, slabs systems, columns, foundations, retaining walls, & an introduction to pre-stressed concrete. Based on a statics & strength of materials, Review of tension, compression & bending steel members designed into truss or column & beam structural systems.

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ARCH331 ARCHITECTURAL DESIGN III (5Cr.: 0Lec, 10Stu)

Design projects leading to the development of architectural concepts. Developmental processes of design are presented & critically evaluated, both graphically & orally. Constructivist design studio emphasizing on structural systems. Portfolio of designs in response to specific aims comprising formal structural & universal space concept. Prerequisite: ARCH292.

ARCH332 ARCHITECTURAL DESIGN IV (5Cr.: 0Lec, 10Stu)

Design studio emphasizing on the urban context as a generator of architecture. Developmental processes of design are presented & critically evaluated, both graphically & orally. Portfolio of designs in response to specific aims comprising advanced study of urban context, development of master plan including design of public spaces & landscaping. Creation of architectural character & identity in the design of spaces & buildings' complex. Prerequisite: ARCH331.

ARCH333 EXECUTION DESIGN I (3Cr.: 1Lec, 4Stu)

Principles of preparing a complete portfolio of architectural tender drawings. Application on a building or project initially designed by the student in ARCH232. Principles of producing integrated portfolio of tender drawings. Analysis & applications of standards, material review & selection. Prerequisite: ARCH294.

ARCH334 EXECUTION DESIGN II (3Cr.: 1Lec, 4Stu)

Preparations of an integrated portfolio of architectural working drawings related to the project assigned to the student in ARCH333. Execution drawings various architectural details (internal & external) interpreting building components relationships. Information relevant to the construction materials, color schemes, execution methods & processes. Prerequisite: ARCH333.

ARCH335 HISTORY OF ARCHITECTURE III (2Cr.: 2Lec)

Overview of Islamic architecture. Roots & early beginnings. Trends & development of Islamic architecture: features & values. Umayyad & Abbasid architecture. Early & classic architecture in North Africa & the Middle East. Evolution of Islamic architecture: Fattimid, Ayyubid, Bahari Mamluk, Circassian Mamluk, & Ottoman architecture.

ARCH336 THEORY OF ARCHITECTURE III (2Cr.: 2Lec)

The formative aspects of architecture from the early 20th century to present day. Emphasis on new trends & associated activities in the field of architecture. Detailed studies of various periods within broad spectrum. Issues of spatial organization, construction, architectural theory, & architectural grammar. Physical, social & economic context of building. Role of the architect in society.

ARCH337 INTERIOR DESIGN (2Cr.: 1Lec, 2Stu)

Interior design theories covering diverse issues & topics as relevant to indoor environments, components of interior design, considerations, characteristics, & relationship with architectural design, methods & processes, contemporary trends & approaches to interior design, values, interpretation & formulation of concepts.

ARCH338 CITY & TOWN PLANNING (2Cr.: 1Lec, 2Stu)

Town Planning theories, practices & ideas. Definitions, objectives & levels of Planning. Origins & evolution of historical & contemporary ideas underlining planning practice in its various forms. Relevant topics: land use, housing, human settlements & urban environments. Current challenges & concerns of urban development or planning, aspects of the planning profession.

ARCH339 ENVIRONMENTAL DESIGN (2Cr.: 1Lec, 2Stu)

Fundamental theories about environmental sustainability, definitions, concerns & processes. Introduction to building assessment systems including LEED, Green Globes, Green Point Rated, etc. Green building Applications on green building design process & sustainable features such as: water conservation systems; recycling, re-use, waste management, green material selection; & indoor environmental control strategies.

MECH431 HVAC & SANITATION FOR ARCHITECTS (2Cr.: 2Lec)

Course addressing two technical fields: HVAC: Introduction to air conditioning & mechanical installations in buildings & indoor spaces. Various heating & cooling systems. Ventilation & air conditioning of various building types. Installations & control of systems. Sanitation: Sanitary engineering issues. Building site selection. Dampness: sources & methods of insulation. Water supply treatment & distribution. Sanitary fixtures, installation & connections. Treatment of soiled water. Rainwater drainage & storm sewers. Biological purification of sewerage. Solid waste & refuse disposal.

ARCH431 ARCHITECTURAL DESIGN V (5Cr.: 0Lec, 10Stu)

Projects leading to the development of a Holistic Design Process. Detailed knowledge of a specialist aspect of design presented & critically evaluated, both graphically & orally. Portfolio of designs aiming to develop environmental conscious buildings, study & analyze environmental, social, & economic aspects of sustainability in architecture. Prerequisite: ARCH332.

ARCH432 ARCHITECTURAL DESIGN VI (5Cr.: 0Lec, 10Stu)

A single project demonstrating the student's readiness & capacity to engage responsibly & creatively in the profession of architecture. Conceptualization & implementation of comprehensive architectural design is drawn upon previous coursework in order to thoroughly develop a project from a detailed program. Portfolio of designs aiming to integrate & synthesize structural & construction assemblies with social, economic & environmental principles of sustainability. Prerequisite: ARCH431.

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ARCH433 EXECUTION DESIGN III (3Cr.: 1Lec, 4Stu)

Development & preparation of complete sets of tender drawings for a building initially designed in ARCH332. Preparation of electro-mechanical working drawings (sanitary, lighting, power supply, & HVAC). Advanced study, analysis & interpretation of composite processes, techniques & treatments. Prerequisite: ARCH334.

ARCH434 EXECUTION DESIGN IV (3Cr.: 1Lec, 4Stu)

Composite drawings illustrating particular execution details of sustainable features considered in a project designed in ARCH431. Preparation of Specification & quantities report for the execution of a part of the project completed in ARCH433. Prerequisite: ARCH433.

ARCH435 URBAN DESIGN (2Cr.: 1Lec, 2Stu)

Contemporary theories of urban design. Urban environments: Keywords & definitions. Modes of critique related to the design of urban public realm. Urban environments: Scope, complexities, & responses to economic, cultural, political, social, aesthetic & natural forces. Urban design issues, methodologies & current practices. Analytical & design skills. Generating & testing alternative approaches of urban design, development of specific sites & role of urban design within particular spatial, social, economic & political contexts. Case studies & assignments in urban design methodologies, synthesis of theoretical knowledge, & communication of urban design ideas.

ARCH436 RESEARCH & PROGRAMMING (2Cr.: 1Lec, 2Stu)

Overview of architectural programming & pre-design stages. Review of principals, theories, methods, techniques, & tools of architectural programming. Preparation of a complete document (not less than 10,000 words in length) aiming to develop a comprehensive architectural program for a project, including assessment of client & user needs, a critical review of appropriate examples, an analysis of site conditions, a review of the relevant laws & standards & assessment of their implication on the project, & a definition of site selection & design assessment criteria.

ARCH437 PROJECT MANAGEMENT (2Cr.: 2Lec)

Introduction to management principles of architectural projects. Survey of the techniques & procedures of construction management as it relates to architectural design professional practice. Overview of the organization of the building team, the collaborative design process, cost control, project scheduling, purchasing, accounting, & field supervision. Introduction to the concepts of Value Engineering, partnering, & Total Quality Management.

ARCH438 SPECIFICATIONS & QUANTITIES (2Cr.: 1Lec, 2Stu)

Introduction to quantity surveying. Methods of measurement & calculations. Preparation of comparative tables of prices & bids & their evaluation. Specification writings. General conditions of contract between architect, client & contractor. Specifications for materials & various constructional works & execution procedures. Preparation of contract document for various trades & works for bids.

CVEE 331 SOIL MECHANICS & FOUNDATIONS, & MATERIAL PROPERTIES & TESTING (2Cr.: 1Lec, 2Tut)

Combined Course addressing two technical fields: Introduction to soil mechanics: Soil formation & soil structure; Soil composition; Grain size analysis; Plasticity of soils; Effective stress concept; shear strength, stress distribution; Bearing capacity of shallow foundation; Theory of consolidation; Settlement; Soil exploration. Foundations: shallow, deep foundations, & pile caps.

Introduction to Testing & properties of materials: strength characteristics of building materials & material assemblies; stress & strain; rigidity & deformation; temperature effects; torsion effects; combined loading of elements & systems.

CVEE 332 SURVEYING FOR ARCHITECTS (2Cr.: 1Lec, 2Lab)

Technology Discussion of the major topics in surveying engineering technology including field instrumentation, boundary surveying, topographic surveying. Measurement of distances, directions & angles, using the tape, level, compass, transit & theodolite. Computation of areas & traverses, lines & grades. Also, an introduction to construction surveys, & an introduction to GPS measurement.

ARCH 533 ARCHITECTURAL CRITICISM (2Cr.: 2Lec)

Lectures & group seminars addressing the evaluation of architectural works, ideologies & approaches. Critical review & assessment of design, interpretation, & responses by different actors. Criteria & methods of analysis & criticism. Appraisal of the delivery process & architectural product.

ARCH 534 GRADUATION THESIS (2Cr.: 1Lec, 2Stu)

This module provides the student with an opportunity to investigate a specific topic within the realm of architecture (history & theory, technology, environment, architectural design, etc). The student will undertake sustained & in-depth research & present a coherently argued, fully referenced & appropriately illustrated piece of academic writing not less than 10,000 words in length. The module will develop research methods relevant to writing a dissertation, & student's intellectual curiosity & critical thinking relating to the dissertation topic

ARCH535 BUILDING REGULATIONS & PROFESSIONAL PRACTICE (2Cr.: 2Lec)

Introduction to building legislation & codes. Theoretical & analytical investigation of methods available to architects. Legal, ethical & professional obligations. Clients & other parties affected by both the practice & business of architecture. Overview of construction industry. Office practice including accounting & financial reporting, employment, procurement of buildings, tendering, building contract administration. Control of cost, time & quality, quality assurance. Programs & regulatory constraints, building legislations, building law & ordinances, urban planning legislation & housing laws, syndicate regulations, servitude & labor union laws.

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ARCH536 DESIGN & BUILDING ECONOMICS (2Cr.: 2Lec)

Overview of factors influencing design & building costs, & approaches to managing costs from initial project definition through construction & use. Techniques for project budgeting, cost estimating, & life cycle cost analysis. Feasibility, cost & value, economic analysis, real estate market. Cost & benefit ratio analysis, & control of cost & depreciation, cost estimating, including determination of materials, labor, equipment, overhead, profit, & other construction costs.

ARCH537 ARCHITECTURAL DESIGN VII (5 Cr.: 0Lec, 10Stu)

Portfolio of designs aiming to study the physical, social, economic, & environmental aspects of urban design, land uses, housing, circulation, densities, & local identity seen from a global perspective. Advanced design problems are approached by applying knowledge & skills acquired from previous design studios. Students are expected to demonstrate technical competencies, knowledge, critical thinking & creative synthesis skills relative to a precise theoretical & practical hypothesis or proposition, communicate intentions & results clearly. Prerequisite: ARCH432.

ARCH539 PROJECT PROGRAMMING (3Cr.: 1Lec, 4Stu)

A research studio-seminar course aiming to develop student independence in defining an Architecture Senior Project. Student must simultaneously address & integrate all aspects of the design/research proposal in a comprehensively developed dissertation. This written document should incorporate research, program development, site definition & analysis of contextual constraints that discusses all design decisions to be considered in the design stage. Prerequisite: ARCH432.

ARCH540 SENIOR PROJECT (8 Cr.: 0Lec, 16Stu)

This Final Design studio is an opportunity for students to develop an individual senior project addressing various factors in the design process. Syntheses should demonstrate understanding & resolution of different issues analyzed in the design of the building, from the understanding of context, to structural & environmental systems, down to the details of construction. Project outcomes are developed with consideration given to social, cultural, ethical, environmental, accessibility, safety, & reliability factors. Detailed representation of complete project aims to interpret comprehensive understanding of architectural design as a holistic approach. Prerequisite: ARCH434, ARCH537, ARCH539.

ARCH541 ARCHITECTURE INTERNSHIP (0Cr.: 0Lec)

A supervised 8 weeks summer training period at an approved Architecture firm (consulting, contracting, etc.) intended to provide students with hands-on experience at the work place. This training may involve office work, field trip, site supervision, or an architectural design workshop that is jointly organized by the Faculty & other local or international institutions / universities. In either option, evaluation is based on: daily performance, supervisors input, student's report, & a short presentation; students are required to submit comprehensive summer training reports together with the necessary proof of documents.

Major Elective Courses

Courses			Crs.	Pre-Co/requisites
ARCH	261	Introduction to Painting	2	
ARCH	262	History of Arts	2	
ARCH	263	Architectural Photography	2	
ARCH	264	Introduction to Shape Grammars	2	
ARCH	361	Architecture & Environment	2	
ARCH	362	Social Studies in Architecture	2	
ARCH	363	Theory of Housing	2	
ARCH	364	Virtual Reality	2	Pre: ARCH278
ARCH	365	Graphic Design	2	Pre: ARCH278
ARCH	461	Landscape Architecture	2	
ARCH	462	Vernacular Architecture	2	
ARCH	463	Intelligent Buildings	2	
ARCH	464	Geographic Information System	2	
ARCH	465	Building Information Modeling	2	
ARCH	466	Environmental Psychology	2	
ARCH	467	Digital Modelling	2	
ARCH	468	Parametric Design & Digital Fabrication	2	
ARCH	561	History of Islamic Arts	2	
ARCH	562	Conservation of Historic Buildings	2	
ARCH	563	Regionalism in Architecture	2	
ARCH	564	Site Planning	2	
ARCH	565	Urban Morphology	2	
ARCH	566	Environmental Impact Assessment	2	
ARCH	567	Topics in Architecture	2	

Description of Major Elective Courses

ARCH261 INTRODUCTION TO PAINTING (2Cr.: 1Lec, 2Stu)

Study of painting language through color, form, materials, & techniques. Aspects of traditional & modern pictorial composition including proportion, space, & color theory through the representation of a variety of subjects.

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ARCH262 HISTORY OF ARTS (2Cr.: 2Lec)

Tracing the evolution of arts through historical periods. Review of different movements & schools. Contexts, values, & cultural influences. Principal features, designs & characteristics. Analysis & comparative studies.

ARCH263 ARCHITECTURAL PHOTOGRAPHY (2Cr.: 1Lec, 2Stu)

Basic elements & processes of architectural photography to include camera controls, exposure technique, photo processing, & fundamental principles of photographing architecture. In-depth photo essays relating to architecture, the urban movement, or landscape design following the introduced principles.

ARCH264 INTRODUCTION TO SHAPE GRAMMARS (2Cr.: 1Lec, 2Stu)

Shape Grammar's concept draws on analogies between visual & natural language, capturing a sense of order in matter & form. It is therefore familiar beside other terms like "style" & "theme" that highlight the awareness of form repetitive patterns, constituent parts, compositional rules & families of designs that share common features. Using "grammar" & "language" as metaphor in design is an attempt to make seemingly tacit practice explicit through defined criteria. Shape grammars provide a formal mechanism for generating compositions based on shapes & their spatial relationships by specifying methods to replace parts of shapes with others.

ARCH361 ARCHITECTURE & ENVIRONMENT (2Cr.: 2Lec)

Basic theories & interpretations of environmental studies in relation to the built environment. Review of environmental concerns & their scope. Environmental problems, pollution, threats & impacts of human actions. Design of the built environment engaged with the natural environment. Influence of natural elements on the making of architecture. Relationship of architecture to site & landscape.

ARCH362 SOCIAL STUDIES IN ARCHITECTURE (2Cr.: 2Lec)

Introduction to the field of sociology, definitions & scope of social studies. Social & cultural characteristics in different societies. Understanding of issues & factors that motivate & influence architectural design & theory, & how architecture is shaped by & shapes cultural concerns & social organization.

ARCH363 THEORY OF HOUSING (2Cr.: 2Lec)

Introduction to contemporary theories & concerns in the field of housing. Roots of housing problem. Housing typologies & classification. Housing sector. Mechanisms & forces shaping the housing market. Factors affecting supply & demand. Economics of housing projects. Feasibility studies. Housing policies & role of government. Residential areas & suburbia. Problems, considerations, & alternative approaches applied in the field.

ARCH364 VIRTUAL REALITY (2Cr.: 1lec, 2Lab)

The dual realm of design, computer modeling & visualization. Critical appreciation of digital media, interpreting real & imaginary 'worlds' from literature in the form of multimedia digital models. Emphasis on experimentation, imagination & technical competence through digital media. Prerequisite: ARCH278.

ARCH365 GRAPHIC DESIGN (2Cr.: 1lec, 2Lab)

Nature & scope of graphic design. Conceptual development. Innovation, technique & presentation. Skills in the areas of representation: logos, packaging, branding & identity, web design & motion graphics. New techniques & methods of artistic expression: issues & directions. Integration of message & content. Innovation, creativity & high standard graphic design. Prerequisite: ARCH278.

ARCH461 LANDSCAPE ARCHITECTURE (2Cr.: 2Lec)

Various theories of architectural landscape, principal landscape design concepts & processes, scope, components & elements, environmental knowledge, contexts & landscape preferences. Design considerations, skills, & scales. Alternative approaches & professional practices. Critique of recent local & international cases of landscape design.

ARCH462 VERNACULAR ARCHITECTURE (2Cr.: 2Lec)

Scope & key definitions. Surveying vernacular architecture. Culture & place influences. Local trends, traditions, & practices. Elements & components. Lessons & values. Connections, continuity & future prospects.

ARCH463 INTELLIGENT BUILDINGS (2Cr.: 2Lec)

Environmental concerns underlying responsive design. Definitions & components of intelligent buildings. Principles of interactive design. Management of indoor environments. The building envelope, automated technologies & smart materials. Integrated building management systems. Efficient use of energy, utilization of renewable energy systems, sustainable management of resources. Analytical techniques & computing tools for studying & assessing building energy & environmental performance.

ARCH464 GEOGRAPHIC INFORMATION SYSTEM (2Cr.: 1Lec, 2Lab)

Information management & decision-making support tools used in urban studies. Definition of GIS. Overview of the range of GIS applications (data acquisition, secondary data generation, analysis & management of data, factor combination & GIS-based modeling. Use of GIS in decision-making. Integration of GIS with other technologies used in the field of urban studies.

ARCH465 BUILDING INFORMATION MODELLING (2Cr.: 1Lec, 2Lab)

Fundamentals of Building Information Modeling (BIM) as a construction documentation system. Introduces concepts & features of BIM. Includes software structure & features, modeling & editing techniques, & sheet creation & organization. Focuses on applying BIM software to develop a set of construction documents. Simulates project development & documentation.

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ARCH466 ENVIRONMENTAL PSYCHOLOGY (2Cr.: 2Lec)

The aim of this course is to help students to create more effective & appropriate environments that address human needs. The Course investigates the interrelationships among the physical environment, natural environment, individual differences, & human behavior & experience. Student are taught to explore the distinctive features of environmental psychology in relation to other forms of psychology, the origin of environmental psychology & how an understanding of human behavior influences & informs responsible design decision making. Emphasis is on the effect of design decisions on human behavior in interior & exterior spaces.

ARCH467 DIGITAL MODELLING (2Cr.: 1Lec, 2Lab)

Course dealing with investigation of design problems through the use of computer graphics from the initial stages of design conceptualization to design development, visualizing a new approach to different issues of computer aided design within the process of generating complex shapes. The course concentrates on the idea of digital design that is giving rise to new architectonic possibilities. The course aims to expose students to generalize the difference between designing according to the algorithmic potential of software programmes & the tectonic parameters of actual building materials. At the same time, the old opposition of tectonics versus the digital design which has given way to a new tectonics of digital design & that can be lead to the desired materialization through the help of CAM technologies will be introduced.

ARCH468 PARAMETRIC DESIGN & DIGITAL FABRICATION (2Cr.: 1Lec, 2Lab)

The goal of this course is to generate designs based on the tools learned throughout the course. The participants in this course will use parametric tools in 3Ds Max & third party scripts to generate design digital forms expressing contemporary global trend. After the course, the projects & instructions will be placed on an open source platform, so anyone can download & use them. Through the design of a small scale architectural project, the superficial will be explored as both a technical operation, through surface modeling & 3D printing, & as a discussion on the relationship between substance & surface.

ARCH561 HISTORY OF ISLAMIC ARTS (2Cr.: 2Lec)

Overview of the cultural history of Islamic societies as expressed by their art & architecture from the 7th century to the present. Changes in artistic styles, architectural advances & expression of the written word compared across time & geography to understand how Islam influenced & was influenced by society throughout history.

ARCH562 CONSERVATION OF HISTORIC BUILDINGS (2Cr.: 2Lec)

Introduction to historic conservation. Cultural considerations. Values & ethics of conservation. Procedures, surveys & documentation. Degrees of intervention. Causes of decay: natural & man-made. Structural behavior in elements of historic buildings. Techniques & practices. Examples & approaches.

ARCH563 REGIONALISM IN ARCHITECTURE (2Cr.: 2Lec)

The course investigates various & evolving definitions of regionalism & theoretical approaches to the problem of designing architecture that reflects its time, place, culture & environment. Thus, the shape of buildings & environments are studied in relation to climate, landscape, availability of resources & cultural backgrounds. It explores the concept of regionalism in architecture; local architectural models around the world; the power of invented regionalism; the persistence of regional revivals; & the impact of regional architecture in historic preservation.

ARCH564 SITE PLANNING (2 Cr.: 1Lec, 2Stu)

Theory, practice & impacts of site planning: zoning, growth management, methods & techniques of land use control. Site identity & character. Systematic surveys & site analysis. Physical, cultural & economic contexts. Critique of recent cases of site planning. Developing land use plans & guidelines, land use ordinances & legal frameworks.

ARCH565 URBAN MORPHOLOGY (2Cr.: 2Lec)

Nature of urban morphology. Systematic study of morphology: Elements, components & relationships. Morphology in relation to urban contexts. Variables & parameters. Morphology & local identity. Approaches to deal with particular morphologies within urban contexts

ARCH566 ENVIRONMENTAL IMPACT ASSESSMENT (2Cr.: 2Lec)

Environmental Impact Assessment for projects (EIA). Strategic Environmental Assessment for policies, plans & programs (SEA). Identifying significant environmental impacts. Environmental management through assessment, prevention, restoration & mitigation of environmental impacts. Preparation of environmental impact statements. Description of decision-making process & tools. Environmental sampling & monitoring programs. Analysis & evaluation of proposed solutions, technical feasibility, examination of case studies.

ARCH567 TOPICS IN ARCHITECTURE (2Cr.: 2Lec)

A focused investigation of selected issues in architecture, architectural design or urbanism. Specific course will vary & will be defined by individual instructors.

Study Plan

Bachelor Degree in Architecture (170 Credit Hours)

First Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	271*	Architectural Design Fundamentals: Visual Studies	6	
ARCH	273*	Building Construction I	2	
ARCH	275	History of Architecture I	2	
ARCH	277	CAD Drawing	2	
ARCH	279	Architectural Sketching	2	
ENGL	001	General English	2	
		Elective ²	2	
Second Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	272	Architectural Design Fundamentals: Physical Studies	5	Pre: ARCH271
ARCH	274	Building Construction II	3	Pre: ARCH273
ARCH	276	Theory of Architecture I	2	
ARCH	278	Computer Graphics	2	Pre: ARCH277
ARCH	280	Academic Writing	2	
ARAB	001	Arabic Language & Literature	2	
		Elective ²	2	
Third Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	291*	Architectural Design I	5	Pre: ARCH272
ARCH	293*	Building Construction III	3	Pre: ARCH274
ARCH	295	History of Architecture II	2	
ARCH	297	Theory of Colors	2	
CVEE	231	Theory of Structures for Architects	2	
BLAW	001	Human Rights	1	
		Elective (General) ¹	1	
		Elective ³	2	

Fourth Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	292*	Architectural Design II	5	Pre: ARCH291
ARCH	294*	Building Construction IV	3	Pre: ARCH293
ARCH	296	Theory of Architecture II	2	
ARCH	298	Indoor Environmental Control	2	
CVEE	232	Concrete & Steel Structures	2	
		Elective (General) ¹	2	
		Elective ³	2	

Fifth Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	331*	Architectural Design III	5	Pre: ARCH 292
ARCH	333*	Execution Design I	3	Pre: ARCH294
ARCH	335	History of Architecture III	2	
ARCH	338	City & Town Planning	2	
MECH	331	HVAC & Sanitation for Architects	2	
		Elective (General) ¹	2	
		Elective ³	2	

Sixth Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	332*	Architectural Design IV	5	Pre: ARCH331
ARCH	334*	Execution Design II	3	Pre: ARCH333
ARCH	336	Theory of Architecture III	2	
ARCH	337	Interior Design	2	
ARCH	339	Environmental Design	2	
		Elective (General) ¹	2	
		Elective ⁴	2	

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Seventh Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	431*	Architectural Design V	5	Pre: ARCH332
ARCH	433*	Execution Design III	3	Pre: ARCH334
ARCH	435	Urban Design	2	
ARCH	437	Project Management	2	
CVEE	331	Soil Mechanics & Foundations, & Material Properties & Testing	2	
		Elective4	2	
		Elective4	2	

Eighth Semester (18 Credits)			Crs.	Pre-co/requisites
ARCH	432*	Architectural Design VI	5	Pre: ARCH431
ARCH	434*	Execution Design IV	3	Pre: ARCH433
ARCH	436	Research & Programming	2	
ARCH	438	Specifications & Quantities	2	
CVEE	332	Surveying for Architects	2	
		Elective5	2	
		Elective5	2	

Ninth Semester (14 Credits)			Crs.	Pre-co/requisites
ARCH	537	Architectural Design VII	5	Pre: ARCH432
ARCH	539	Project Programming	3	Pre: ARCH432
ARCH	534	Graduation Thesis	2	
ARCH	535	Building Regulations & Professional Practice	2	
ARCH	541	Architecture Internship	0	
		Elective5	2	

Tenth Semester (12 Credits)			Crs.	Pre-co/requisites
ARCH	540	Senior Project	8	Pre: ARCH537 ARCH539 ARCH434
ARCH	533	Architectural Criticism	2	
ARCH	536	Design & Building Economics	2	

¹ A total of 12 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Cr.), ENGL 001 (2Cr.), BLAW 001 (1Cr.) & another 7 credits are selected from the University Elective Courses list. Descriptions of the university requirement courses are shown in the Introduction section of this catalogue.

² Selected from the list of Faculty Elective Courses offered at the "200 Level".

³ Selected from the list of Faculty Elective Courses offered at the "300 Level".

⁴ Selected from the list of Faculty Elective Courses offered at the "400 Level".

⁵ Selected from the list of Faculty Elective Courses offered at the "500 Level".

* These core modules are separated & independently graded courses. Students failing the first module (Fall Sem.) is not allowed to register in the second one (Spring Sem.).

II- DESIGN PROGRAMS

The Faculty offers a Bachelor Degree in Interior Design, Graphic Design, Landscape Design, & Fashion Design where the minimum duration of study is 6 semesters.

Admission Requirements

To be accepted for an undergraduate degree, applicants must:

- Hold the official Lebanese Secondary School Certificate in a branch relevant to the chosen undergraduate field of specialization, or an official equivalent;
- Successfully pass an entrance exam to measure the level of proficiency in English Language (or provide evidence of English Language abilities such as TOEFL, ILETS.
- All applicants are required to attend an Interview / Oral Exam & Submit a portfolio.

Graduation Requirements

To receive a Bachelor Degree in the Design Programs, a student must satisfactorily complete the credit hours required & get an overall minimum grade point average (GPA) of 2.0 + ICDL.

The following table summarizes the number of credits required for graduation:

Program	* University Requirements + ICDL		Program Requirements		Total Credit Hours
	Mandatory Courses	Elective Courses	Major Core Courses	Free & Major Elective Courses	
INTD GRAD FASD	5	13	- Common Foundation Requirements : 22 Crs. - Mandatory Core Courses: 59 Crs. Total: 81	9	108
LAND	5	13	- Common Foundation Requirements : 22 Crs. - Mandatory Core Courses: 62 Crs. Total: 84	9	111
INTD: Interior Design GRAD: Graphic Design FASD: Fashion Design LAND: Landscape Design					

* A total of 18 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Crs.), ENGL 001 (2Crs.), BLAW 001 (1Cr.) & another 13 credits are selected from the University Elective Courses list + ICDL.

Common Requirements

The following are the descriptions of the curricular components that are common to all Design programs.

University Requirements

Student working for a Bachelor degree in Design programs must complete a total of 18 credit hours of University requirement courses distributed as follows:

Mandatory University Requirements Courses

Courses			Crs.
ENGL	001	General English	2
ARAB	001	Arabic Language & Literature	2
BLAW	001	Human Rights	1

Elective University Requirements Courses

Descriptions of the university requirement courses are shown in the introduction section of this catalogue.

Common Foundation Requirements

Courses			Crs.	Pre-Co/requisites
ARTD	201	Design Fundamentals	4	
ARTD	203	Photography	3	
ARTD	205	History of Arts I	3	
ARTD	206	History of Arts II	3	
ARTD	207	Computer Aided Drafting & Design I	3	
ARTD	209	Freehand Drawing	3	
ARTD	309	Environmental Psychology	3	

Course Description of the Common Foundation Requirements

ARTD201 DESIGN FUNDAMENTALS (4Crs.: 1Lec; 6Stu)

This design fundamental course introduces ideas, methodologies, principles, & skills that comprise a common knowledge base important to all design disciplines. These fundamentals foster a multidisciplinary design experience among students & prepare them to move to the next level.

Coursework explores basic design elements & processes of visual communication, through exercises that improve visual & manual drawing skills. These exercises encompass format, line, pattern, proportion, scale, & texture, as well as interpretation of space (edge, perspective, dimension), & conceptualization.

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ARTD203 PHOTOGRAPHY (3Cr.:2Lec;2Sec)

Students develop a basic understanding of the digital camera & current electronic imaging technology. The course explores the utilization of photography as a means of design production & portfolios' documentation. It covers the basic principles for lighting, setup & shooting with 35mm & digital cameras. Students will take pictures of both two-dimensional & three-dimensional objects.

ARTD205 HISTORY OF ARTS I (3Cr.: 3Lec)

The course includes a chronological survey of the visual arts as an expression of the mind & culture of Western civilization from the Prehistoric period, through the Near Eastern, Egyptian, Greek, Roman, Early Christian, Jewish & Byzantine art; & Gothic, Renaissance (Italian & Northern), & Baroque Art & Architecture. The course is designed to help students increase their art historical vocabulary for discussing an art object's medium, composition, style, & iconography.

ARTD206 HISTORY OF ARTS II (3Cr.:3Lec)

This course is an introduction to Western art before the Neoclassical to the present day, & covers Neo-Classicism, Realism, Impressionism & Modernist movements from Fauvism through Abstract Expressionism to Contemporary. Concepts such as artists' influence, artistic motifs, stylistic evolution, cultural context, patronage, function, reception, & censorship as well as the incorporation of non-European art forms into the Western Tradition will be covered in this class.

ARTD207 COMPUTER AIDED DRAFTING & DESIGN I (3Cr.:2Lec;2Lab)

Application of computer-aided drafting & design (CADD) concepts, methods, & skills used in all design disciplines. Digital 3D modeling & 2D presentation tools, used in conjunction with computer-aided design (CAD) software, are used to translate students' fundamental manual presentation techniques to digital drawing, modeling, & layout. Emphasis on the utilization of the CADD functions & skills to further enhance the design development & production phases of the design process.

ARTD209 FREEHAND DRAWING (3Cr.:1Lec;4Stu)

A lecture/studio course for developing the student's freehand drawing skills, with emphasis on analytic & descriptive drawings of everyday objects, building interiors, landscaping, vehicles, & people. Drawing media will include graphite, ink, charcoal, & pastel or colored pencil.

ARTD309 ENVIRONMENTAL PSYCHOLOGY (3Cr.: 3Lec)

The aim of this course is to help students to create more effective & appropriate environments that address human needs. The Course investigates the interrelationships among the physical environment, natural environment, individual differences, & human behavior & experience. Student are taught to explore the distinctive features of environmental psychology in relation to other forms of psychology, the origin of environmental psychology & how an understanding of human behavior influences & informs responsible design decision making. Emphasis is on the effect of design decisions on human behavior in interior & exterior spaces.

a- Interior Design Program

Mission

The mission of the Interior Design Program at Beirut Arab University is to provide learning opportunities that integrates critical thinking skills with a wide variety of creative experiences in the field of Interior Design. Very broadly, the Interior Design Program seeks to provide students with the highest professional standards to advance a human-centered practice of interior design that contributes positively to the health, safety & well-being of people in local, regional & global contexts.

Objectives

The broad aim of interior design program is to provide a variety of transformative learning opportunities to shape creative, rational, & socially & environmentally responsible design professionals. This thorough goal is supported through the following objectives:

- To sustain premium standards for interior design education through professional accreditation.
- To provide students with necessary skills for interacting with multiple disciplines in collaborative environments.
- To promote communicative design methods which define & achieve users' needs in various environments.
- To develop effective communication skills, with a solid background of design theories, histories, environmental responsiveness, & standards; along with creative, abstract & critical thinking skills.
- To influence students with a high sense of social & ethical responsibilities.

Learning Outcomes

Graduates of this program acquire the essential knowledge & skills of successful practitioners in the field of Interior Design. Six critical outcomes are identified as essentials for students to achieve the above mentioned aim. Graduates will demonstrate the ability to:

- Formulate a complete understanding of the historical & theoretical fundamentals & universal principles of interior design.
- Develop a comprehensive, human-centered, socially & economically responsive design through creative problem-solving within interior environments.
- Integrate designs within the context of building technology systems using appropriate materials & products.
- Develop attitudes, traits & values of professional responsibility, accountability & effectiveness.
- Communicate effectively & express ideas in writing, orally & graphically.
- Acquire the necessary knowledge for applying laws, codes, regulations, standards & practices that maintain the health, safety & welfare of the public.
- Attain a managerial foundation required for professional practice.

Career Opportunities

There are many different fields to enter in the interior design profession. You could be a residential, interior designer serving home owners or you could practice commercial interior design. Within commercial design you could work on offices, restaurants, banks, malls, hotels, & so on. Within each of those specialties, you could be a project manager heading up the entire project, a drafts person or a specifier of products. You could be a sales representative for a number of different products. You could own or operate a fabric warehouse, a design firm, or be a partner in a firm.

Common Requirements

The list of Common Requirement courses & their descriptions are presented in the introductory pages of the Design Programs section in this catalogue.

Mandatory Core Courses

Courses			Crs.	Pre-Co/requisites
INTD	202	Interior Design Studio I	4	Pre: ARTD201
INTD	204	Building Systems	3	
INTD	208	Computer Aided Drafting & Design II	3	Pre: ARTD207
INTD	210	Theory of Colors	3	
INTD	301	Interior Design Studio II	4	Pre: INTD202
INTD	302	Interior Design Studio III	4	Pre: INTD301
INTD	303	Interior Materials & Specifications	3	Pre: INTD204
INTD	304	Interior Execution Design & Detailing I	3	Pre: INTD303
INTD	305	History of Interiors & Furnishing	3	
INTD	306	Textile & Furnishing Materials	3	
INTD	307	Interior Perspectives	3	
INTD	308	Lighting Design	3	
INTD	401	Interior Design Studio IV	4	Pre: INTD302
INTD	402	Interior Design Senior Project	6	Pre: INTD401, INTD403
INTD	403	Interior Execution Design & Detailing II	3	Pre: INTD303
INTD	404	Interior Design Professional Practice & Ethics	3	
INTD	405	Furniture Design	3	
INTD	407	Internship	1	

Description of Mandatory Core Courses

INTD 202 INTERIOR DESIGN STUDIO I (4Crs.:0Lec; 8Stu)

This course is an introduction to the field of interior design. Topics of functional & aesthetic elements for residential interiors are covered, including the identification of client needs, programming, standards, space planning, drawings, & presentations. Concept design, development, & articulation are emphasized & represented through the use of sketches, mechanical drawings, & perspectives tools, as well as models. Pre-req.: ARTD201

INTD 204 BUILDING SYSTEMS (3Crs.:1Lec;4Stu)

This Course develops an understanding of the basic structural theories systems for buildings. This is followed by an overview of building components with a focus on structural impact for interior design practice. Students are also introduced to the function of environmental support systems, including the basic technical requirements for building systems (mechanical, electrical, & fire detection/control) & how they affect interior design decisions & construction drawings.

INTD 208 COMPUTER AIDED DRAFTING & DESIGN II (3Crs.:2Lec;2Lab)

This course is designed to explore digital techniques of 2 & 3 dimensional interior space. Students will explore advanced techniques & appropriate digital tools to help them quickly visualize their designs volumetrically & apply 3D design elements within the spatial envelope. Special attention is given to utilizing digital media as support for visual & verbal communication through a review of 3-D modeling concepts, computer-aided rendering concepts, & methods in the development of interior design. Pre-req.: ARTD207

INTD 210 THEORY OF COLORS (3Crs.:2Lec;2Sec)

This course introduces the use of color for interior design. Emphasis is on color theory, psychology of color & how it affects human mood & behavior, & application of color in interior environments & lighting conditions. Included is the vocabulary of color, color temperatures, the principles of the color wheel & how to use it. With the use of paint values, tones, & shades are mastered.

INTD 301 INTERIOR DESIGN STUDIO II (4Crs.:0Lec;8Stu)

Based on the foundation of Interior Design I, the aim of this course is to develop students' knowledge of the fundamentals of interior design practice. The concept of place making is much considered in the given projects, emphasizing on the design methods & constraints. Students are introduced to commercial design theories & workspace ergonomics, applying them to specific design conditions to experience & develop an understanding of the designer's role in creating public spaces. Considerations are given to users of various age, culture, income, & physical abilities. Pre-req.: INTD202

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INTD 302 INTERIOR DESIGN STUDIO III (4Cr.:0Lec;8Stu)

An intermediate studio course where students continue to develop their understanding of functional & formal elements of architectural interiors, as well as principles & characteristics of interiority. In this course, students acquire knowledge of retail shops design, focusing on programming skills, space planning & circulation strategies, to create interior environment that successfully display & market products with respect to standards & architectural constraints. Pre-req.: INTD301

INTD 303 INTERIOR MATERIALS & SPECIFICATIONS (3Cr.:1Lec; 4Stu)

This Course introduces students to the properties & specifications of appropriate materials, other than those of a structural nature, which are appropriate for the interior environments, including materials for floors, walls, ceilings, windows, & other interior surfaces. Special attention is given to the health effects & environmental impact of material choices in interior design. Students investigate the designer's role & responsibility in the process of material selection in order to provide aesthetic, standard compliance, & sustainable finish specifications for a variety of spaces. Pre-req.: INTD204

INTD 304 INTERIOR EXECUTION DESIGN & DETAILING I (3Cr.:1Lec;4Stu)

In this course, students develop their knowledge & graphical skills necessary for the production of working drawings of interior constructions, such as floor plans, elevations, sections, finish schedules, reflected ceiling plans, & details. Emphasis is placed on the selection, specification & illustration of appropriate materials, assemblies & components. Pre-req.: INTD303

INTD 305 HISTORY OF INTERIORS & FURNISHING (3Cr.:3Lec)

This course reviews the historical aspects of architecture, interiors, & furniture from early civilizations through the Rococo period, focusing on developments in Western Europe, the English Georgian period in the early 18th century through the Victorian revivals of the 19th century, proto-modernist movements in the latter half of the 19th century in England, & concluding with the Neo-modern movement that concludes the 20th century. Students explore historic styles of the habitat & its furnishings as an expression of peoples' needs & values of the time. Construction methods & materials are covered in more depth & specific color & fabric influences are explored.

INTD 306 TEXTILE & FURNISHING MATERIALS (3Cr.:3Lec)

This course gives students a broad understanding of textiles & their usage in interior environment. Topics include textile design, fibers, methods of weaving, dyeing, finishes & trims, flammability, consumer protection, specification of textiles for residential & non-residential end-users, & designer responsibility as related to consumer health, safety & welfare.

INTD 307 INTERIOR PERSPECTIVES (3Cr.:2Lec;2Stu)

Students are expected to demonstrate an understanding of theory of two-point mechanical perspective, & to develop freehand drawing & sketching skills of interior & exterior spaces. This course explores the use of various media to define light, shadows, textures, & illustrate materiality & spatial character. Students also learn fundamental presentation board layout & composition.

INTD308 LIGHTING DESIGN (3Cr.:3Lec)

This Course focuses on the fundamentals of light: its sources, variations, quality, design implications, product variations, technologies & cost/benefits. Students learn how to integrate appropriate lighting choices, from both technical & aesthetic perspectives, covering the four function of light: task, accent, decorative & ambient. Lighting for the specific sectors of built environments (residential, retail, corporate, etc.) is discussed & evaluated as an imperative creative design feature & form-maker.

INTD401 INTERIOR DESIGN STUDIO IV (4Cr.:0Lec;8Stu)

An advanced studio course that aims to further develop students' skills in design process & methods, as well as creative & critical skills, to propose solutions to complex residential projects. The students analyze spatial needs in terms of client needs, human behavior, life style & function & develop a design that integrates those needs with a focus on social, cultural, economic & technical issues & theoretical understanding to various concepts of home & living spaces. Pre-req.: INTD302.

INTD402 INTERIOR DESIGN SENIOR PROJECT (6Cr.:0Lec;12Stu)

In this course, students choose their own complex senior design project topic & work towards more self-directed learning. In this advanced studio students are required to incorporate the skills & knowledge gained throughout their studies to create a comprehensive project, including a written research of the topic, programming & design requirements, presentation drawings, models, material & furniture boards, detail drawings & specifications. Students work independently with tutor's guidance to generate creative professional level design outcomes with associated levels of detailing of their projects choosing to focus on one or more of the following: materiality, sustainability, universal design, human factors or any other areas. Pre-req.: INTD401, INTD403.

INTD403 INTERIOR EXECUTION DESIGN & DETAILING II (3Cr.:1Lec;4Stu)

This course provides advanced study of interior building construction, materials, detailing & building services. Interior detailing includes but is not limited to, interior partitions, stairs, fireplaces, doors, windows. Students examine current practices & standards of building services, including electrical, plumbing, sprinklers, HVAC, communications & security. Pre-req.: INTD303

INTD404 INTERIOR DESIGN PROFESSIONAL PRACTICE & ETHICS (3Cr.:3Lec)

This course provides an introduction to business practices & procedures in the field of interior design . Students are introduced to the basic principles of operating an Interior Design business, planning for profit & growth, writing contracts, marketing, selling, & project management. Topics discussed also include professional ethics & socially responsible design. Emphasis is on the development of project administration documents within the context of legal & ethical obligations to the public.

INTD405 FURNITURE DESIGN (3Cr.:1Lec;4Stu)

This design studio focuses on the aesthetic & functional issues related to the construction of freestanding furniture. The design & construction of both hard & soft furniture elements are covered. Special attention is given to anthropometric & ergonomic considerations, as well as to the development of detailed drawings & model of the designed furniture piece to better understand construction connections & detailing.

INTD407 INTERNSHIP (1Cr.:1Lec)

Students spend 120 hours in a monitored professional environment to gain the necessary experience that compliments the program's academic work. Work experience provides students with practical experience in areas which are relevant to their specific interests & skills. Students should be exposed to various aspects of the interior design field & must present a report about their experience.

Major Elective Courses

Courses			Crs.	Pre-Co/requisites
INTD	220	Scenography	3	
INTD	221	Building Information Modeling	3	
INTD	222	Acoustics Design	3	
INTD	223	Historic Interior Preservation	3	
INTD	224	Introduction to Islamic Arts	3	
INTD	225	Graphic Design	3	

Description of Major Elective Courses

INTD220 SCENOGRAPHY (3Cr.:2Lec;2 Stu)

Students are introduced to the methods, concepts & materials of designing for theatre sceneries. Through diverse-approach workshops, students explore the ways in which space, time, light, sound, object, color & form may be woven together on theatre stage to impress & communicate with spectator. Students study also the methods of developing a design from script analysis to presentation of the completed design.

INTD221 BUILDING INFORMATION MODELING (3Cr.:2Lec; 2Lab)

In this course, students explore the use of Building Information Modeling (BIM) technology as a communication & collaboration tools. Emphasis is on 3-D modeling & rendering as well as preparation of construction documents resulting at the professional level.

INTD222 ACOUSTICS DESIGN (3Cr.:3Lec)

This course covers the fundamentals of architectural acoustics. Topics include: sound generation & propagates; human sound perceptions; sound level descriptors; acoustic properties of materials & their place in the development of holistic design concepts. Students apply acoustic design criteria, methods, & materials to spaces for various activities & functions, such as theatres, classrooms, auditorium, open-plan office, etc.

INTD223 HISTORIC INTERIOR PRESERVATION (3Cr.:3Lec)

In this course, students learn the principles & theories of preservation & adaptive reuse of historical interiors. Topics include treatment of historic interior surfaces, materials, interior architectural features, & decorative arts in restoration & rehabilitation projects.

INTD224 INTRODUCTION TO ISLAMIC ARTS (3Cr.:3Lec)

In this course, students are introduced to the different eras of Islamic arts. Emphasis is on the decorative patterns & motifs that distinguish the prominent Islamic periods, including the construction & applications of Islamic calligraphy, geometry & floral designs in interiors. Modern manifestations of this style in today's Islamic world are also reviewed.

INTD225 GRAPHIC DESIGN (3Cr.:2Lec;2Lab)

This course introduces students to two-dimensional elements & principles of graphic design as the basis of visual language & communication. Through problem solving approach, students manipulate graphic forms & design elements in black-and-white & color media to convey meaning, strategies for idea generation & development of distinctive concepts. Emphasis is given to the importance of presentation & craftsmanship.

Study Plan

Bachelor Degree in Interior Design (108 Credit Hours)

First Semester (18 Credits)			Crs.	Pre-co/requisites
ARTD	201	Design Fundamentals	4	
ARTD	203	Photography	3	
ARTD	205	History of Arts I	3	
ARTD	207	Computer Aided Drafting & Design I	3	
ARTD	209	Freehand Drawing	3	
ENGL	001	General English	2	
Second Semester (18 Credits)			Crs.	Pre-co/requisites
INTD	202	Interior Design Studio I	4	Pre: INTD201
INTD	204	Building Systems	3	
ARTD	206	History of Arts II	3	
INTD	208	Computer Aided Drafting & Design II	3	Pre: ARTD207
INTD	210	Theory of Colors	3	
ARAB	001	Arabic Language & Literature	2	
Third Semester (18 Credits)			Crs.	Pre-co/requisites
INTD	301	Interior Design Studio II	4	Pre: INTD202
INTD	303	Interior Materials & Specifications	3	Pre: INTD204
INTD	305	History of Interiors & Furnishing	3	
INTD	307	Interior Perspectives	3	
ARTD	309	Environmental Psychology	3	
BLAW	001	Human Rights	1	
		Elective (General) ¹	1	
Fourth Semester (18 Credits)			Crs.	Pre-co/requisites
INTD	302	Interior Design Studio III	4	Pre: INTD301
INTD	304	Interior Execution Design & Detailing I	3	Pre: INTD303
INTD	306	Textile & Furnishing Materials	3	
INTD	308	Lighting Design	3	
		Elective (General) ¹	2	
		Elective (General) ¹	2	
		Elective (General) ¹	1	

Fifth Semester (18 Credits)			Crs.	Pre-co/requisites
INTD	401	Interior Design Studio IV	4	Pre: INTD302
INTD	403	Interior Execution Design & Detailing II	3	
INTD	405	Furniture Design	3	
INTD	407	Internship	1	
		Elective ²	3	
		Elective (General) ¹	2	
		Elective (General) ¹	2	
Sixth Semester (18 Credits)			Crs.	Pre-co/requisites
INTD	402	Interior Design Senior Project	6	Pre: INTD401 INTD403
INTD	404	Interior Design Professional Practice & Ethics	3	Pre: INTD303
		Elective ²	3	
		Elective ²	3	
		Elective (General) ¹	2	
		Elective (General) ¹	1	

¹ A total of 18 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Cr.), ENGL 001 (2Cr.), BLAW 001 (1Cr.) & another 13 credits are selected from the University Elective Courses list. Descriptions of the university requirement courses are shown in the Introduction section of this catalogue.

² Selected from the list of Major Elective Courses offered.

b- Graphic Design Program

Mission

The mission of the Graphic Design Program at Beirut Arab University is to provide students with the technical, conceptual, & cultural background necessary to demonstrate proficiency as visual communicators. The program introduces students to a progressive series of courses that develop students' ability for problem solving through critical thinking, stimulating their sense of creativity & imagination, & preparing them into professionals ready for a wide variety of entry-level jobs in the field of Graphic Design.

Objectives

The aim of the Graphic Design Program is to inspire graphic designers into generating & creating effective visual communications through developing their individual talent, potential, & personal language. The key objectives of the graphic design program are to:

- Help students develop strong technical & conceptual design skills.
- Help students explore & understand the issues of contemporary Graphic Design practice.
- Expose students to all the skills & tools relevant to this industry, both traditional & digital.
- Provide students with practical knowledge & experience with industry-standard tools & equipments.
- Develop an understanding of business & marketing practices, creating ethical & responsible industry professionals.

Learning Outcomes

Graduates of this program will acquire the essential knowledge & skills of successful practitioners in the field of Graphic Design. Graduates will demonstrate the ability to:

- Demonstrate proficiency in design principles, design process, & contemporary design practice with a solid theoretical & historical background.
- Develop an understanding of design process & problem solving methods utilizing critical thinking skills.
- Consider the effect of Graphic Design on the human environment through social responsibility, environmental responsiveness, & interdisciplinary perspectives.
- Demonstrate expertise in recognized technical skills.
- Understand & apply basic principles in the process of designing, analyzing, & evaluating graphic design solutions in relation to specific end uses & consumer needs & preferences.

Career Opportunities

A graduate of this program will be qualified to work in:

Graphic Design Studios, Advertising Agencies, Multimedia Studios, Publishing Houses, Printing Companies, Art Departments in Large Corporations & Freelance Graphic Designer.

Graphic design jobs cover all ends of the creative spectrum:

Creative / Art Director, Layout Artist & Brand Identity Designer, Logo Designer, Flash Designer, Illustrator, Technical Illustrator, Photo Editing / Photoshop Artist, Multimedia Designer, Photographer, Web Designer & Advertising / Marketing.

Common Requirements

The list of Common Requirement courses & their descriptions are presented in the introductory pages of the Design Programs section in this catalogue.

Mandatory Core Courses

Courses			Crs.	Pre-Co/requisites
GRAD	202	Graphic Design Studio I	4	Pre: ARTD201
GRAD	204	Theory & Philosophy of Visual Communication	3	
GRAD	208	Computer Graphics	3	Pre: ARTD207
GRAD	210	Theory of Colors in Visual Arts	3	
GRAD	301	Graphic Design Studio II	4	Pre: GRAD202
GRAD	302	Graphic Design Studio III	4	Pre: GRAD301
GRAD	303	Typography I	3	
GRAD	304	Typography II	3	Pre: GRAD303
GRAD	305	History of Visual Communication	3	
GRAD	306	Web Design	3	
GRAD	307	Digital Imaging	3	Pre: GRAD208
GRAD	308	Motion Graphics	3	
GRAD	401	Graphic Design Studio IV	4	Pre: GRAD302
GRAD	402	Graphic Design Senior Project	6	Pre: GRAD401
GRAD	403	Interactive Design	3	
GRAD	404	Graphic Design Professional Practice & Ethics	3	
GRAD	405	Print & Production Media	3	
GRAD	407	Internship	1	

Description of Mandatory Core Courses

GRAD202 GRAPHIC DESIGN STUDIO I (4Crs.:0Lec;8Stu)

The course develops students' basic skills needed to structure & organize visual communications in both conventional & digital environments. Emphasis is placed on conceptual development, structural organization of information, & interaction of form & verbal content to effectively communicate ideas. Students learn to think critically, evaluate design proposals aesthetically, & become familiar with a variety of tools & techniques used to produce professional work in the fields of graphic design & advertising. Pre-req.: ARTD201.

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GRAD204 THEORY & PHILOSOPHY OF VISUAL COMMUNICATION (3Crs.:3Lec)

This course explores the theoretical & philosophical issues, concepts, & processes of visual communication in its many settings, to help students bring together message, meaning, & form. Students are trained to employ type & layout principles, image-making concepts, & design processes in visual/verbal communications with multiple media outcomes.

GRAD208 COMPUTER GRAPHICS (3Crs.:2Lec;2Lab)

This is an introductory course to bit-mapped & vector-based digital imaging. Students develop both creative & technical skills necessary to create & produce images for digital or print-based media using Macintosh computer Operating System, Adobe Photoshop & Illustrator, as well as a variety of image formats, color models, & file & font management. Pre-req.: ARTD207

GRAD210 THEORY OF COLORS IN VISUAL ARTS (3Crs.:2Lec;2Sec)

This fundamental course provides an introduction to the principles & theories of colours as it relates to graphic design & visual communication, by understanding how colours interact to make appropriate design decisions. Topics include the vocabulary of colour, perception & colour intensity, the value scale & simultaneous contrast, the effects & physics of colour, & theories of colour psychology. Students also explore colour calibration, both with software & hardware tools.

GRAD301 GRAPHIC DESIGN STUDIO II (4Crs.:0Lec;8Stu)

Graphic design is explored through the integration of typography & imagery from planning, conceptualization, & creation, through management of content for a variety of projects. Major themes addressed in this course are: contrast & fusion of graphic form, text/image collage, hierarchy, grid systems, & extended layouts. Critiques & discussions of professional work including traditional structures of books, catalogues, magazines, & brochures. Pre-req.: GRAD202.

GRAD302 GRAPHIC DESIGN STUDIO III (4Crs.:0Lec;8Stu)

Students learn to develop visual identity systems for organizations & companies applied to print, web, & broadcast media. This is achieved through the study of how organizations use identity design to express core values & impact consumer perceptions of brand. Students develop design projects with clear process starting from research & conceptualization, to image, type generation, layout, presentation, & evaluation. Pre-req.: GRAD301.

GRAD303 TYPOGRAPHY I (3Crs.:2Lec;2Stu)

Typography I is an introductory course to the basic terminology, anatomy & structure of type. Students start to develop an appreciation of & sensitivity to letterform. The course includes a survey of the historical development of Typographic forms & different classifications of type families. Students generated designs that illustrate typography as a meaningful element of visual communication.

GRAD304 TYPOGRAPHY II (3Crs.:2Lec;2Stu)

This course builds on the fundamentals learned in Typography I Course. Students explore the relationship between type & image across print & digital media. Emphasis is placed on the development of more complex design combining visual & verbal elements, as well as the development of advanced publication layout skills, grid-based typographic structures, & information design. Pre-req.: GRAD303.

GRAD305 HISTORY OF VISUAL COMMUNICATION (3Crs.:3Lec)

This course reviews the historical context for the graphic arts of calligraphy, typography, book design, diagramming, & illustration. Emphasis is placed on the relationship of these applied arts to the fine arts, technology, & social & political history. Through informed discussions, the convergence of art & human-computer interactivity is examined in the last 25 years, triggering new forms of artistic visual expressions.

GRAD306 WEB DESIGN (3Crs.:2Lec;2Lab)

This course introduces students to the fundamentals of XHTML (extensible markup language) & CSS (cascading style sheets) content for the development & manipulation of websites, logging in to a web server, creating a web page template, uploading to a remote web server & modify web pages. Students also learn how to critically evaluate website quality, & how to create & maintain quality web pages.

GRAD307 DIGITAL IMAGING (3Crs.:2Lec;2Lab)

Students are introduced to Photoshop & Adobe Bridge applications for the efficient production, management & manipulation of raster images. Several exercises are given to students to become professional with the capabilities of given software applications by exploring both the technical aspects of image manipulation, as well as the artistic aspects of creating images. Topics include raster graphics, setting up files for different destinations, creating & manipulating raster graphics & photographs, applying & adjusting effects, non-destructive editing techniques applied in web design, print & application interfaces. Pre-req.: GRAD208.

GRAD308 MOTION GRAPHICS (3Crs.:2Lec;2 Lab)

In this course, students gain a solid foundation of motion graphics & effects techniques that support their creativity & enhance their digital skills through learning to create short animated compositions by combining texts, images, & videos. Projects incorporate rotoscoping (drawing on live video), frame by frame hand-drawn animation, editing videos, adding audio tracks, cutting & pasting additional sources, utilizing 2D animation tools.

GRAD401 GRAPHIC DESIGN STUDIO IV (4Crs.:0Lec;8Stu)

This course focuses on the design & construction of three-dimensional forms such as packaging, exhibits, & displays. Students conceptualize & develop preliminary construction plans, & build three-dimensional models of their design projects using a variety of materials & techniques. Additional emphasis is placed on developing students' ability to conduct significant research & analysis. Students may address projects involving the renewal of an existing brand & subsequent packaging applications within a coherent marketing program. Pre-req.: GRAD302.

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GRAD402 GRAPHIC DESIGN SENIOR PROJECT (6Cr.: 0Lec;16Stu)

In this course each student is required to develop a professional portfolio plus a written dissertation including self-promotion, resume, & visual documentation of the selected project. The prepared portfolio should demonstrate professional competence in design, concept, technical skills, & craft & meets high standards of excellence. Pre-req.: GRAD401

GRAD403 INTERACTIVE DESIGN (3Cr.:2Lec;2Lab)

This course introduces students to design elements & techniques for mobile applications. Through lectures & applied projects, students learn how to conceptualize, design, prototype, & execute interactive applications for portable digital devices. Students are challenged to examine the aesthetic, cultural, & technological implication of this emerging art field & market.

GRAD404 GRAPHIC DESIGN PROFESSIONAL PRACTICE & ETHICS (3Cr.:3Lec)

This course examines the historic & contemporary modes of graphic design practice including career strategies, professional ethics, & business practices. Students are introduced to the basic principles of operating a graphic design business, planning for profit & growth, writing contracts, marketing, selling, & project management.

GRAD405 PRINT & PRODUCTION MEDIA (3Cr.:3Lec)

Student investigates the production process of printed material from original copy & digital files. Topics include major printing processes, preparation of typography, photography, illustration, & colour separations for commercial output. The course also covers the relationships between cost, quality, & time constraints for printed materials, as well as recent developments in digital & print process.

GRAD407 INTERNSHIP (1Cr.:1Lec)

Students spend 120 hours in a monitored professional environment to gain the necessary experience that compliments the program's academic work. Work experience provides students with practical experience in areas which are relevant to their specific interests & skills. Students should be exposed to various aspects of graphic design & must present a report about their experience.

Major Elective Courses

Courses			Crs.	Pre-Co/requisites
GRAD	220	Portfolio Planning	3	
GRAD	221	Marketing & Social Media	3	
GRAD	222	Digital Mixed Media	3	
GRAD	223	Sequential Photography	3	
GRAD	224	Arabic Topography	3	
GRAD	225	Story Boarding	3	

Description of Major Elective Courses

GRAD220 PORTFOLIO PLANNING (3Crs.:3Lec)

This course prepares students for job interviews by helping them compile a portfolio. Students plan a self-branding strategy & integrate this across all facets of their portfolio: online website, personal blog, printed portfolio, design samples, & résumé package. The accumulated & refined portfolio is to demonstrate student's conceptual, design, craftsmanship & other skills.

GRAD221 MARKETING & SOCIAL MEDIA (3Crs.:2Lec;2Lab)

Students develop an understanding of social media as an essential strategy of marketing nowadays, & an intelligent aspect of any business plan. This course covers not only the fundamentals of social media marketing, but also the basics of integrating them into an online presence. From building Facebook pages to authoring Twitter bios, the course covers both online services & discusses how to make best use of them as a social marketing media.

GRAD222 DIGITAL MIXED MEDIA (3Crs.:2Lec;2Lab)

This course provides students with the opportunity to explore the creative potential presented through the imaginative combination of both traditional & digital media. Students are asked to utilize & combine skills learned in traditional & digital illustration courses to present inspiring & creative illustrations unrestricted by a singular medium.

GRAD223 SEQUENTIAL PHOTOGRAPHY (3Crs.:3Lec)

This course concentrates on using images in sequence. Students explore how sequence based images, by way of editing & text, create relationships between images & ultimately tell stories that the single image cannot. Students work independently & in small groups to further explore notions of authorship & the roll of documentary photography in a contemporary art context.

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GRAD224 ARABIC TYPOGRAPHY (3Crs.:2Lec;2Lab)

This course is an introduction to the realm of publishing & print industries relative to Arabic culture & traditional forms. Students are introduced to the basic Arabic type & custom lettering. In addition, the course provides a survey of the history & evolution of Arabic typography, with particular reference to Islamic calligraphy & arabesque patterns.

GRAD225 STORY BOARDING (3Crs.:3Lec)

In this course, students study the theories & techniques of storytelling of art for graphic novels, comic books, children's books, & storyboards for animation & film. Topics include the development of scripts, storyboarding, pencilling, inking, digitizing, & computer colouring.

Study Plan

Bachelor Degree in Graphic Design (108 Credit Hours)

First Semester (18 Credits)			Crs.	Pre-co/requisites
ARTD	201	Design Fundamentals	4	
ARTD	203	Photography	3	
ARTD	205	History of Arts I	3	
ARTD	207	Computer Aided Drafting & Design I	3	
ARTD	209	Freehand Drawing	3	
ENGL	001	General English	2	
Second Semester (18 Credits)			Crs.	Pre-co/requisites
GRAD	202	Graphic Design Studio I	4	Pre: ARTD201
GRAD	204	Theory & Philosophy of Visual Communication	3	
ARTD	206	History of Arts II	3	
GRAD	208	Computer Graphics	3	Pre: ARTD207
GRAD	210	Theory of Colors in Visual Arts	3	
ARAB	001	Arabic Language & Literature	2	
Third Semester (18 Credits)			Crs.	Pre-co/requisites
GRAD	301	Graphic Design Studio II	4	Pre: GRAD202
GRAD	303	Typography I	3	
GRAD	305	History of Visual Communication	3	
GRAD	307	Digital Imaging	3	Pre: GRAD208
ARTD	309	Environmental Psychology	3	
BLAW	001	Human Rights	1	
		Elective (General) ¹	1	

Fourth Semester (18 Credits)			Crs.	Pre-co/requisites
GRAD	302	Graphic Design Studio III	4	Pre: GRAD301
GRAD	304	Typography II	3	Pre: GRAD303
GRAD	306	Web Design	3	
GRAD	308	Motion Graphics	3	
		Elective (General) ¹	2	
		Elective (General) ¹	2	
		Elective (General) ¹	1	

Fifth Semester (18 Credits)			Crs.	Pre-co/requisites
GRAD	401	Graphic Design Studio IV	4	Pre: GRAD302
GRAD	403	Interactive Design	3	
GRAD	405	Print & Production Media	3	
GRAD	407	Internship	1	
		Elective ²	3	
		Elective (General) ¹	2	
		Elective (General) ¹	2	

Sixth Semester (18 Credits)			Crs.	Pre-co/requisites
GRAD	402	Graphic Design Senior Project	6	Pre: GRAD401
GRAD	404	Graphic Design Professional Practice & Ethics	3	
		Elective ²	3	
		Elective ²	3	
		Elective (General) ¹	2	

¹ A total of 18 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Cr.), ENGL 001 (2Cr.), BLAW 001 (1Cr.) & another 13 credits are selected from the University Elective Courses list. Descriptions of the university requirement courses are shown in the Introduction section of this catalogue.

² Selected from the list of Major Elective Courses offered.

c- Landscape Design Program

Mission

The Mission of the Landscape design program is to prepare students into becoming innovative landscape practitioners, in both public service & private practice, to create a positive impact on the natural & built environments, as they intersect with means of urbanization of the local, regional, & international communities. The offered program builds a design expertise based on both theoretical & applied understanding of human & natural systems, gained through an interdisciplinary approach to project-based learning.

Objectives

The Landscape Design Program aims at addressing contemporary issues facing regional landscapes & communities. Accordingly, the program objectives are to:

- Educate students through design-centered, planning & technical classes, exploring the roles of nature, culture, & community in shaping human, built & natural environments.
- Develop students' ability to integrate aesthetic, artistic, scientific, cultural, institutional, social, ecological, & technological dimensions in the design, planning and/or management of landscapes.
- Enhance the students' personal development & understanding of ethical principles & ecological values through an effective balance of problem-solving & communication skills, & global awareness.
- Develop students' ability to find & evaluate information & to work as a member of a productive, collaborative group.

Learning Outcomes

Graduates of this program will acquire the essential knowledge & o successful practitioners in the field of Landscape Design. Graduates will demonstrate the ability to:

- Promote an ethic of environmental & cultural presidency by integrating aesthetic, artistic, scientific, cultural, legal, political, economic, social, ecological, & technological dimensions in solving problems to achieve exemplary design & management of man-made & natural landscapes.
- Demonstrate advanced graphical, verbal, & written presentation skills.
- Understand, employ & evaluate the principles, theories, & recent trends in the field of Landscape Design.
- Work independently & in collaboration with others to create solutions for complicated landscape design and/or planning problems.
- Create applicable designs that further enhance public health, safety & welfare in contemporary urban cities.
- Perform as an entry-level landscape designer in public or private offices.

Career Opportunities

A graduate landscape designer will be qualified to work in Site Planning, Urban Design, Regional Landscape Planning, Park & Recreation Planning, Land Development Planning, Ecological Planning & Design, Heritage Conservation, Landscape Reclamation & Restoration, Social/Behavioral aspects of landscape design.

Other career options include Consulting Services, Landscape Developer, Landscape Planner, Greenway Initiator, Landscape Assessor, Garden Designer, & Landscape Contractor.

Common Requirements

The list of Common Requirement courses & their descriptions are presented in the introductory pages of the Design Programs section in this catalogue.

Mandatory Core Courses

Courses			Crs.	Pre-Co/requisites
LAND	202	Landscape Design Studio I	4	Pre: ARTD201
LAND	204	Landscape Construction Materials & Specifications	3	
LAND	208	Digital Media in Landscape	3	Pre: ARTD207
LAND	210	Landscape Horticulture	3	
LAND	301	Landscape Design Studio II	4	Pre: LAND202
LAND	302	Landscape Design Studio III	4	Pre: LAND301
LAND	303	Landscape Construction: Site Systems & Engineering	3	Pre: LAND204
LAND	304	Landscape Execution & Detailing I	3	Pre: LAND303
LAND	305	Landscape Architecture History	3	
LAND	306	Plant Biology	3	
LAND	307	Landscape Ecology	3	
LAND	308	Geographic Information System	3	
LAND	310	Surveying	3	
LAND	401	Landscape Design Studio IV	4	Pre: LAND302
LAND	402	Landscape Design Senior Project	6	Pre: INTD401, INTD403
LAND	403	Landscape Execution Design & Detailing II	3	Pre: LAND304
LAND	404	Landscape Design Professional Practice & Ethics	3	
LAND	405	Sustainable Landscape Design	3	
LAND	407	Internship	1	

Description of Mandatory Core Courses

LAND202 LANDSCAPE DESIGN STUDIO I (4Cr.:0Lec;8 Stu)

This course is the first in the sequence of landscape design studios where students are introduced to the development of landscape design processes as applied to small-scale projects: analysis & evaluation of site development procedures; shaping landscape form & space, applied landscape elements & plants. Pre-req.: ARTD201.

LAND204 LANDSCAPE CONSTRUCTION MATERIALS & SPECIFICATIONS (3Cr.: 1Lec;4 Stu)

This course provides an introduction to site construction & landscape materials & techniques. Topics addressed involve site work & principles of cut/fill, design & placement of various structures, diverse paving materials of pedestrian & vehicular circulation spaces, & site drainage materials. Students learn how to read plans & also prepare plans showing construction details including: walls, walkways, wooden structures, & water features.

LAND208 DIGITAL MEDIA IN LANDSCAPE (3Cr.:2Lec;2 Lab)

This course introduces digital applications & methodologies useful in landscape design' interpretive, interactive design, production, & presentation processes. Students explore digital techniques & tools to develop their designs volumetrically & apply landscape graphics in exterior perspectives. Special attention is given to the effective use of color, quick method of creating perspectives as an integral part of design process in generating, evaluating & presenting design ideas. Pre-req.: ARTD207

LAND210 LANDSCAPE HORTICULTURE (3Cr.:3Lec)

This course introduces the basic principles of selection & management of landscape plants. Students study the habitat, site & technical conditions, & characteristics of plant typologies & their application to landscape horticulture. Issues addressed are the use of native & exotic plants typical of landscape practice in diverse contexts ranging from natural areas to urban settings.

LAND301 LANDSCAPE DESIGN STUDIO II (4Cr.:0Lec;8Stu)

In this design studio, students explore site planning theories, methods & resources used in analyses. This course trains students on the processes of measuring various physical qualities of a site or landscape, such as adjacent buildings, topography, circulation, facilities, & human functions, & then how to apply site planning theories to evaluate landscape design potentials & viability. Focus is on the form implications of applying specific materials, plantings & structural systems, as well as earthwork & drainage. Pre-req.: LAND202.

LAND302 LANDSCAPE DESIGN STUDIO III (4Cr.:0Lec;8Stu)

This course is an advanced module of landscape planning & design at neighbourhood scale. Emphasis is placed on functional relationships, transportation network, green infrastructure, & public services in a mix of housing & commercial projects, by applying appropriate technologies & strategies that promote environmentally & economically sustainable community forms, as well as better social equity. Pre-req.: LAND301.

LAND303 LANDSCAPE CONSTRUCTION: SITE SYSTEMS & ENGINEERING (3Cr.:1Lec;4Stu)

Students develop an understanding of the principles & techniques of landform manipulation for design & drainage. Issues addressed include contour manipulation, topographic & grading problems in landscape engineering: drainage plans, grading plans, spot elevations, road alignment, sections & profiles & cut-and-fill calculations. Pre-req.: LAND204.

LAND304 LANDSCAPE EXECUTION DESIGN & DETAILING I (3Cr.:1Lec;4 Stu)

This course examines the relationship between landscape design & implementation through construction principles & techniques addressed in preceding courses. Students develop a comprehensive set of working drawing that applies structural theories, selection of materials, detailing & technical specifications commonly used in landscape design. Pre-req.: LAND303.

LAND305 LANDSCAPE ARCHITECTURE HISTORY (3Cr.:3Lec)

This course reviews the development of landscape architecture as an art form from the 8th through the 19th centuries till nowadays. Students are introduced to imperative examples of landscape from the eastern, central Asian, & western regions of the world. The cultural & social history of each epoch is also reviewed as a means of critically analyzing the addressed ideas & concepts of landscape design.

LAND306 PLANT BIOLOGY (3Cr.:3Lec)

In this course, the visual & ecological characteristics of plants used in landscape design are identified. Emphasis is on landscape plants for urban contexts in Mediterranean climates, identifying the basic taxonomic techniques applied to trees, shrubs, vines & herbaceous plants grown in: parks, streets, containers in balconies or roof gardens, green roofs, vertical walls, etc.

LAND307 LANDSCAPE ECOLOGY (3Cr.:3Lec)

Students are introduced to the concepts of ecology & landscape ecology related to sustainable site planning & design. Emphasis is placed on using theory, conservation ethics, & legal regulations to guide planning & design decision making, with a goal of greater integration of ecological concepts & sustainability of landscape.

LAND308 GEOGRAPHIC INFORMATION SYSTEM (3Cr.:2Lec;2Lab)

Students are introduced to Geographic Information Systems (GIS) applications appropriate to landscape analysis. Applications include data acquisition, secondary data generation, analysis & management of data, factor combination & GIS-based modelling, use of GIS in decision-making, & Integration of GIS with other technologies used in the field of Landscape Design.

LAND310 SURVEYING (3Cr.:2Lec;2Lab)

This course is designed to familiarize students with surveying techniques & grading principles that are essential to interpreting topographical information & understanding natural & man-made features that influence grade changes in the landscape. Students are trained to basic applications of survey equipment, note-keeping, plotting & other measuring techniques that are useful to landscape profession.

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LAND401 LANDSCAPE DESIGN STUDIO IV (4Cr.:0Lec;8 Stu)

This studio focuses on generating planning & design strategies for urban sustainable communities, where open spaces are viewed as a catalyst for community development & revitalization. Topics include community identification, social cohesiveness, social, economic & political factors, & community safety & liveability. Pre-req.: LAND302

LAND402 LANDSCAPE DESIGN SENIOR PROJECT (6Cr.:0Lec;12Stu)

In this course student should demonstrate integration & application of the knowledge & skills from all courses in the program. Each student develops a comprehensive independent landscape project from initial research & site investigation to detailed design, implementation, & technical details. Pre-req.: INTD401, INTD403.

LAND403 LANDSCAPE EXECUTION DESIGN & DETAILING II (3Cr.:1Lec;4 Stu)

This Course provides an understanding of essential considerations of design implementation & construction documentation in landscape architecture. Emphasizes is placed on preparing a set drawings, detailing, & specifications of a specialty topic in landscape design. Pre-req.: LAND304.

LAND404 LANDSCAPE DESIGN PROFESSIONAL PRACTICE & ETHICS (3Cr.:3 Lec)

This course examines the historic & contemporary modes of landscape practice including practice types, ethics, operations, & client systems. Students are introduced to the basic principles of operating a Landscape business, planning for profit & growth, writing contracts, marketing, selling, & project management. Topics discussed also include professional ethics & socially responsible design. Emphasis is given to projected trends of professional practice & the development of administrative documents within the context of legal & ethical obligations to the public.

LAND405 SUSTAINABLE LANDSCAPE DESIGN (3Cr.:3Lec)

This course reviews the principles & practices required to generate a sustainable environment. Matters facing communities, locally & globally, are investigated & discussed. Emphases are placed on methods used to create landscapes that improve the environment by conserving resources & reducing chemical application. Students learn how site design, plant selection, & water management practices influence the sustainability of the designed landscape.

LAND407 INTERNSHIP (1Cr.:1Lec)

Students spend 120 hours in a monitored professional environment to gain the necessary experience that compliments the program's academic work. Work experience provides students with practical experience in areas which are relevant to their specific interests & skills. Students should be exposed to various aspects of landscape design & site planning field & must present a report about their experience.

Major Elective Courses

Courses			Crs.	Pre-Co/requisites
LAND	220	Interior Landscaping	3	
LAND	221	Advanced GIS for landscape	3	
LAND	222	Organic Landscaping	3	
LAND	223	Identification of Mediterranean Flora	3	
LAND	224	Water Gardening	3	
LAND	225	Preservation of Historic Landscape	3	

Descriptions of Major Elective Courses

LAND220 INTERIOR LANDSCAPING (3Crs.:3Lec)

The course examines principles & practices of interior landscaping in residential & commercial buildings. Discussed issues cover design, selection, planting, & maintenance of plants suitable for indoor use. Effects of interior plants on people & the environment are also studied.

LAND221 ADVANCED GIS FOR LANDSCAPE (3Crs.:2Lec;2Lab)

This is an advanced course in Geographic Information Systems (GIS). Students expand their studies in GIS applications appropriate to landscape analyses. GIS applications includes organization of digital spatial data in an accessible & logical manner for site design, recreation master planning, visual analysis, comprehensive planning, & resource management.

LAND222 ORGANIC LANDSCAPING (3Crs.:3Lec)

This course is about the principals & practices of organic landscaping. It covers both the use of “organic” materials & the use of “organic” cultural practices. Content includes an overview of landscape pertaining to the ecosystem of local garden, ways to build soil richness, plant nutrition using organic fertilizers, methods of growing plants that are naturally resistant to pests & disease.

LAND223 IDENTIFICATION OF MEDITERRANEAN FLORA (3Crs.: 3Lec)

This course identifies plants that are commonly used in the Mediterranean region. Students develop an effective knowledge of plant types. Focus is placed on plant selection techniques, plant associations, & issues of plants for use in standard landscape settings.

LAND224 WATER GARDENING (3Crs.:3Lec)

In this course, students learn to design, construct & maintain diverse types of water gardens. Understand the nature & scope of water gardens. Topics includes indoor & outdoor water features (ponds, fountains, water walls, etc), spas & swimming pools, & water plants. The course also review generic construction materials & technical equipments used for water gardens & pools such as pumps , lights & filters.

LAND225 PRESERVATION OF HISTORIC LANDSCAPE (3Crs.:3Lec)

This course reviews the development of landscape preservation from its beginning in the 19th century to the most recent ideas about heritage & landscape. Through guided readings & class discussions, students develop an understanding of the history of the landscape preservation movement & its value in shaping responsible management today.

Study Plan

Bachelor Degree in Landscape Design (111 Credit Hours)0

First Semester (18 Credits)			Crs.	Pre-co/requisites
ARTD	201	Design Fundamentals	4	
ARTD	203	Photography	3	
ARTD	205	History of Arts I	3	
ARTD	207	Computer Aided Drafting & Design I	3	
ARTD	209	Freehand Drawing	3	
ENGL	001	General English	2	

Second Semester (18 Credits)			Crs.	Pre-co/requisites
LAND	202	Landscape Design Studio I	4	Pre: ARTD201
LAND	204	Landscape Construction Materials & Specifications	3	
ARTD	206	History of Arts II	3	
LAND	208	Digital Media in Landscape	3	Pre: ARTD207
LAND	210	Landscape Horticulture	3	
ARAB	001	Arabic Language & Literature	2	

Third Semester (18 Credits)			Crs.	Pre-co/requisites
LAND	301	Landscape Design Studio II	4	Pre: LAND202
LAND	303	Landscape Construction: Site Systems & Engineering	3	Pre: LAND204
LAND	305	Landscape Architecture History	3	
LAND	307	Landscape Ecology	3	
ARTD	309	Environmental Psychology	3	
BLAW	001	Human Rights	1	
		Elective (General) ¹	1	

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Fourth Semester (18 Credits)			Crs.	Pre-co/requisites
LAND	302	Landscape Design Studio III	4	Pre: LAND301
LAND	304	Landscape Execution Design & Detailing I	3	Pre: LAND303
LAND	306	Plant Biology	3	
LAND	308	Geographic Information System (GIS)	3	
LAND	310	Surveying	3	
		Elective (General) ¹	2	
Fifth Semester (18 Credits)			Crs.	Pre-co/requisites
LAND	401	Landscape Design Studio IV	4	Pre: LAND302
LAND	403	Landscape Execution Design & Detailing II	3	Pre: LAND304
LAND	405	Sustainable Landscape Design	3	
LAND	407	Internship	1	
		Elective ²	3	
		Elective (General) ¹	2	
		Elective (General) ¹	2	
Sixth Semester (18 Credits)			Crs.	Pre-co/requisites
LAND	402	Landscape Design Senior Project	6	Pre: LAND401, LAND403
LAND	404	Landscape Design Professional Practice & Ethics	3	
		Elective ²	3	
		Elective ²	3	
		Elective (General) ¹	2	
		Elective (General) ¹	2	
		Elective (General) ¹	2	

¹ A total of 18 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Cr), ENGL 001 (2Cr), BLAW 001 (1Cr) & another 13 credits are selected from the University Elective Courses list. Descriptions of the university requirement courses are shown in the Introduction section of this catalogue.

² Selected from the list of Major Elective Courses offered.

d- Fashion Design Program

Mission

The mission of the Fashion Design Program at Beirut Arab University is to provide learning opportunities that integrates critical thinking skills with a wide variety of creative experiences in the field of Fashion Design. Very broadly, the Fashion Design Program seeks to provide students with the highest professional standards to advance a human-centered practice of Fashion design that contributes positively to the health, safety & well-being of people in local, regional & global contexts.

Objectives

The broad aim of Fashion design program is to provide a variety of transformative learning opportunities to shape creative, rational, socially & environmentally responsible Fashion design professionals. This thorough goal is supported through the following objectives:

- To develop the intellectual & practical skills of the student in the concepts, principles, development & realization of costumes design for the fashion industry, with a solid background of design theories, histories, environmental responsiveness, & standards; along with creative & critical thinking skills.
- To foster the development of an open minded & creative attitude, balanced with organizational skills & responsiveness to the rapidly changing needs of the fashion industry & to achieve users' needs in various environments.
- To develop effective communication skills in relation to written, oral & visual language, including proficient knowledge of information technologies.
- To prepare the students with a range of professional & transferable skills for interacting with multiple disciplines in collaborative environments.
- Develop an understanding of business & marketing practices, creating ethical & responsible industry professionals.

Learning Outcomes

Graduates of this program will acquire the essential knowledge & hands-on skills of successful practitioners in the field of Fashion Design. Six critical outcomes are identified as essentials for students to achieve the above mentioned aim. Graduates will demonstrate the ability to:

- Demonstrate a comprehensive, human-centered, socially, economically & environmentally responsive design through the application of critical & analytical problem-solving methods within the fashion design process.
- Formulate a complete understanding of the historical & theoretical fundamentals & universal principles of Fashion design.
- Demonstrate professional technical competence in a range of pattern cutting & garment construction methods & all aspects of fashion production.
- Communicate effectively & express ideas in writing, orally & employ a range of information technologies applications to visualize, articulate & promote outcomes & ideas.
- Acquire the necessary knowledge required for professional practice.
- Demonstrate consistent development of transferable skills in collaborating effectively in teams, & working with professional designers.

Career Opportunities

Fashion designer, Clothing/textile technologist, Retail buyer, Retail manager, Retail merchandiser
 Textile designer, Visual merchandiser, Event organizer.

Common Requirements

The list of Common Requirement courses & their descriptions are presented in the introductory pages of the Design Programs section in this catalogue.

Mandatory Core Courses

Courses			Crs.	Pre-Co/requisites
FASD	202	Fashion Design Studio I	4	Pre: ARTD201
FASD	204	Pattern Making	3	
FASD	208	Computer Aided Design for Fashion Design	3	Pre: ARTD207
FASD	210	Fashion Illustration	3	Pre: ARTD209
FASD	301	Fashion Design Studio II	4	Pre: FASD202
FASD	302	Fashion Design Studio III	4	Pre: FASD301
FASD	303	Sewing Techniques	3	
FASD	304	Textile Design	3	
FASD	305	History of Costume & Fashion Design	3	
FASD	306	Accessories Design	3	
FASD	307	Draping Design I	3	Pre: FASD204
FASD	308	Draping Design II	3	Pre: FASD204, FASD307
FASD	401	Fashion Design Studio IV	4	Pre: FASD302
FASD	402	Fashion Design Senior Project	6	Pre: FASD401
FASD	403	Grading	3	Pre: FASD208
FASD	404	Fashion Design Professional Practice & Ethics	3	
FASD	405	Fashion Portfolio	3	Pre: FASD208
FASD	407	Internship in Fashion Design	1	

Description of Mandatory Core Courses

FASD202 FASHION DESIGN STUDIO I (4 CR.: 1 LEC; 6 STU)

This course is an introduction to the fundamental creative process of Fashion design & a continuation of the Integrative Studios. The course will focus on drawing methods & design techniques - in the process of developing casual wear- to integrate material skills, techniques & concepts from other courses like patternmaking & sketching into project work. Students will begin to identify & understand collaboration, conceptual development & primary research within the context of Fashion design while building their capacities for investigation, critical thinking, & working across media. PREREQUISITE: ARTD201

FASD204 PATTERN MAKING (3 CR.:2 LEC;2 STU)

This Course develops an understanding of basic patterns & how to manipulate them respecting the fundamental rules of pattern making. By understanding pattern construction students will be able to gain a wider understanding of the use of the pattern for various sectors while developing basic concepts.

FASD208 COMPUTER AIDED DESIGN FOR FASHION DESIGN (3Cr.: 2Lec; 2Lab)

This course is designed to explore digital techniques of 2D & 3D Modeling & animation software such as Adobe Illustrator, Adobe Photoshop. .Students will manipulate basic blocks using the pattern design software (PDS) & create garment models, orders, & markers for production. In addition, they will explore advanced techniques & appropriate digital tools to help them quickly visualize & enhance their ability to efficiently create original ideas by computer. Special attention is given to utilizing digital media as support for visual & verbal communication through a review of 3-D modeling concepts, computer-aided rendering concepts, & digital image creation. Pre-req.: ARTD207

FASD210 FASHION ILLUSTRATION (3CR.: 2 LEC; 2 SEC)

This course introduces the techniques of fashion design sketches & illustrations. Students will learn how to sketch fashion figures, add garments, & hand-rendering of different materials using media like colored pencils & markers. Emphasis is on the fast sketching of models & garments with the rendering of different textures, Theoretical & practical aspects of color are studied in-depth including practical problems dealing with color harmony, trends, association, symbolism, optical illusion, notation & terminology. Pre-req.: ARTD209

FASD301 FASHION DESIGN STUDIO II (4 CR.: 0 LEC; 8 STU)

Based on the foundation of Fashion Design Studio I, the aim of this course is to develop students' knowledge of the fundamentals of fashion design practice. Students will be moving towards a competency in the application of design & research processes while seeking appropriate technical 3D solutions to produce tailored garments along with fitting knits. Considerations are given to users of various age, culture, income, & physical abilities. In addition to understanding the fitting process, selection of textiles & weaves, color scheming, sewing, & selection of accessories. Pre-req.: FASD202.

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FASD302 FASHION DESIGN STUDIO III (4CR.: 0LEC; 8STU)

An intermediate studio course where students continue to develop their personal research methodologies, design philosophy, processes & innovative approaches to materiality, as well as examine more complex design concepts in order to demonstrate a breadth of understanding of brand identity & user contexts. In this course, Consideration will be given to the visual curation of the fashion process in terms of personal identity; focusing on development of original designs & execution incorporating draping, drafting & flat pattern techniques. Pre-req.: FASD301.

FASD303 SEWING TECHNIQUES (3 CR.: 1 LEC; 4 STU)

This Course introduces students to the basics of sewing from a technical point of view. During the semester the student will learn how to use various sewing machines, both industrial & household. Students will also investigate & then execute all the basic stitches used in the apparel industry.

FASD304 TEXTILE DESIGN (3 CR.: 2 LEC; 2 STU)

This course is a comprehensive overview of the textile industry with a study of textile science, covering the design & production techniques of textiles & fabric styling. Emphasis is on dyeing, printing & finishing of textiles. students learn many different textile techniques such as swatch weaving, dyeing yarns, direct painting & wet painting, discharge print, block printing, silk screening, free motion stitching & yarns appliqué, beading, smocking, etc.

FASD305 HISTORY OF COSTUME & FASHION DESIGN (3CR.: 3 LEC)

This course reviews the developments in Costume & Fashion design around the world from early civilizations to the present & the factors that influence style changes. An in-depth study of fashion creators, trends, & the political climate that has created men's & women's fashion during the 20th century. Students should gain a greater perspective on the historical, social, economic, industrial precursors & contexts to contemporary fashion's design & trends.

FASD306 ACCESSORIES DESIGN (3CR.: 2 LEC; 2 STU)

This course is focused on the exploration of the fundamentals of female accessories design: bags, shoes, belts & hats. Students will acquire the basic skills needed to coordinate & develop their own collection portfolio & will get acquainted with the technical methodology to make accessories design.

FASD307 DRAPING I (3CR.: 2 LEC; 2 STU)

Students are expected to demonstrate an understanding of the basic rules of draping & create sample garments. Sewing machines & basic stitches will also be used to create personal creative projects from the conceptual phase to the finished garment. Pre-req.: FASD204.

FASD308 DRAPING II (3CR.: 2 LEC; 2 STU)

This is an advanced draping course in which students will realize items focusing on the cuts & fit of garments. Students will work on bias drapes, collar & sleeve variations. In the second part of the course students will execute three given projects, for example a dress, a bustier & business attire, that the student interprets according to his/her style & then executes from start to finish in their own size. Pre-req.: FASD204, FASD307.

FASD401 FASHION DESIGN STUDIO IV (4CR.: 0 LEC; 8 STU)

An advanced studio course that aims to further develop students' skills in design process & methods, as well as creative & critical skills to expands & broadens technical skills to develop a personal design philosophy in readiness for senior capstone experience, Includes couture evening wear techniques & research processes. Emphasis is placed on Economic & Environmental sustainability in their design work. Pre-req.: FASD302

FASD402 FASHION DESIGN SENIOR PROJECT (6CR.: 0 LEC; 12STU)

In this course, students choose their own senior design project topic & work towards more self-directed learning. In this capstone course, students are required to incorporate the skills & knowledge gained throughout their studies to create a full garment line from conception to execution, to be presented & judged by experts during finals in student fashion show. Emphasis is placed on creativity, originality, technical skill & execution, as well as marketability Students work independently with tutor's guidance to generate original & creative professional level design outcomes. Pre-req.: FASD401

FASD403 GRADING (3 CR.: 2LEC; 2 STU)

In this course, Industrial theory & grading techniques are examined with respect to traditional manual grading & CAD applications. Anthropometric data & grading charts are analyzed in relation to size ranges & garment types. Pre-req.: FASD208

FASD404 FASHION DESIGN PROFESSIONAL PRACTICE & ETHICS (3 CR.: 3LEC.)

This course develops students understanding of professional practice & Ethics in the fashion design industry. Students are introduced to industry practices such as unit & inventory control & pricing, Licensing & retail environments. Topics discussed also include professional ethics, social responsibility & Intellectual property such as trademarks, copyrights..etc. Emphasis is on the different roles within fashion business structure, career development options, fashion marketing & manufacturing.

FASD405 FASHION PORTFOLIO (3 CR.: 1 LEC; 4 STU)

This advanced fashion design course is structured in order to expand students' knowledge & application of digital skills applicable to their personal digital professional portfolio that will add to the paper one. The students will work on their fashion collection, starting with their previous projects & adding concept boards, color story, fabrics, trims, illustrations & technical drawings in addition to the creation of a personal resume, business card & a digital brochure. Pre-req.: FASD208.

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FASD407 INTERNSHIP IN FASHION DESIGN (1 CR)

Students are required to complete 120 hours of documented work experience between first & third year in a monitored professional environment to gain the necessary experience that compliments the program's academic work. Work experience provides students with hands-on practical training in areas which are relevant to their specific interests & skills, & may include but are not limited to: working on fabric/garment prototyping, design assistance, window display, merchandising. Students should be exposed to various aspects of the Fashion design field & must present a report about their experience. This course is graded on a pass/fail basis.

Major Elective Courses

Courses			Crs.	Pre-Co/requisites
FASD	220	Semiotics	3	
FASD	221	Advanced Color Theory	3	Pre: FASD 210
FASD	222	Special Topics in Fashion Design	3	
FASD	223	Sustainability in Fashion	3	
FASD	224	Fashion Event Planning	3	
FASD	225	Fashion & Local Identity	3	

Description of Major Elective Courses

FASD220 SEMIOTICS (3 CR.: 3 LEC)

Students are introduced to the problems associated with perception, understanding, interpretation & creation of visual representations. Students study also an introduction to the language of representation, through the analysis & comprehension of concepts such as rhetoric, narrative, stereotype, Signs & their meaning, the construction of reality, mythology & ideology, semiotics of art & mass media.

FASD221 ADVANCED COLOR THEORY (3CR.: 2LEC; 2STU):

This course begins with a conceptual review of basic color theory & reviews issues studied in earlier courses such as color systems, interaction & harmony. The course will provide students with advanced knowledge in the following specialized areas: color & lighting, color psychology/emotions, symbolism, forecasting, branding, visual merchandising, graphic design, ethnic color usage, science, measurement, technology, management, & careers in color. Pre-req.: FASD210

FASD222 SPECIAL TOPICS IN FASHION DESIGN (3CR.)

This course provides study in Fashion design on a special topic. May be repeated for credit if topics vary.

FASD223 SUSTAINABILITY IN FASHION (3CR.: 3LEC)

In this course, students learn the social, cultural & environmental ramifications of our design decisions. Students use their skills as designers to develop creative solutions to technical challenges in moving our industry & our society towards sustainability. More specifically students will review the ecological crisis & how fashion/textiles contribute to this crisis.

FASD224 FASHION EVENT PLANNING (3CR.: 3LEC)

This course focus on the theoretical & practical application of event planning, including the selection of a suitable location, budget planning, promotion & public relations. The course also include developing working schedule, & working within assigned time frames.

FASD225 FASHION & LOCAL IDENTITY (3CR.: 3LEC)

This course fosters a broad understanding of the complex relationships between dress & culture in the non-Western world. Students should gain a greater perspective on the historical, social, economic, industrial precursors that has created men's & women's fashion trends in the Middle East. These geographical & cultural variations reflect a complex set of relations between historical change & clothing practices as markers of changing identity over time, including differences relating to gender, age, wealth, & religious status.

Study Plan

Bachelor Degree in Fashion Design (108 Credit Hours)

First Semester (18 Credits)			Crs.	Pre-co/requisites
ARTD	201	Design Fundamentals	4	
ARTD	203	Photography	3	
ARTD	205	History of Arts I	3	
ARTD	207	Computer Aided Drafting & Design I	3	
ARTD	209	Freehand Drawing	3	
ENGL	001	General English	2	

Second Semester (18 Credits)			Crs.	Pre-co/requisites
FASD	202	Fashion Design Studio I	4	Pre: ARTD201
FASD	204	Pattern Making	3	
ARTD	206	History of Arts II	3	
FASD	208	Computer Aided Drafting & Design for Fashion Design	3	Pre: ARTD207
FASD	210	Fashion Illustration	3	
ARAB	001	Arabic Language & Literature	2	

Third Semester (18 Credits)			Crs.	Pre-co/requisites
FASD	301	Fashion Design Studio II	4	Pre: FASD202
FASD	303	Sewing Techniques	3	
FASD	305	History of Costume & Fashion Design	3	
FASD	307	Draping I	3	Pre: FASD204
ARTD	309	Environmental Psychology	3	
BLAW	001	Human Rights	1	
		Elective (General) ¹	1	

Fourth Semester (18 Credits)			Crs.	Pre-co/requisites
FASD	302	Fashion Design Studio III	4	Pre: FASD301
FASD	304	Textile Design	3	
FASD	306	Accessories Design	3	
FASD	308	Draping II	3	Pre: FASD204, FASD307
		Elective (University General Requirements) ¹	2	
		Elective (University General Requirements) ¹	2	
		Elective (University General Requirements) ¹	1	

Fifth Semester (18 Credits)			Crs.	Pre-co/requisites
FASD	401	Fashion Design Studio IV	4	Pre: FASD302
FASD	403	Grading	3	Pre: FASD208
FASD	405	Fashion Portfolio	3	Pre: FASD208
FASD	407	Internship in Fashion Design	1	
		Elective ²	3	
		Elective (University General Requirements) ¹	2	
		Elective (University General Requirements) ¹	2	

Sixth Semester (18 Credits)			Crs.	Pre-co/requisites
FASD	402	Fashion Design Senior Project	6	Pre: FASD401, FASD403
FASD	404	Fashion Design Professional Practice & Ethics	3	
		Elective ²	3	
		Elective ²	3	
		Elective (University General Requirements) ¹	2	
		Elective (University General Requirements) ¹	1	

¹ A total of 18 credits is required as General University Requirements; 5 credits are selected from the University Mandatory Courses list including ARAB 001 (2Cr.), ENGL 001 (2Cr.), BLAW 001 (1Cr.) & another 13 credits are selected from the University Elective Courses list. Descriptions of the university requirement courses are shown in the Introduction section of this catalogue.

² Selected from the list of Major Elective Courses offered.