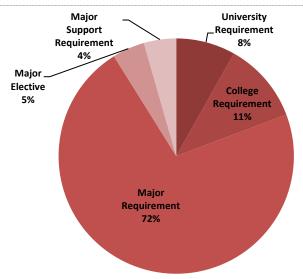
# **Bachelor in Interior Design 2014**

## **Program Components**

Course Type	CRD	
University Requirement (UR)	11	
College Requirement (CR)	15	
Major Requirement (MR)	97	
Major Elective (ME) <sup>1</sup>	6	
Major Support Requirement (MSR)	6	
Interior Design Training (Yes)	0	
Total Credit (CRD)	135	



 $<sup>^{\</sup>rm 1}$  Student must choose two elective courses from Major Elective Courses list.

Teaching Language: English

## **Detailed Study Plan**

Year 1 - Semester 1

Course Code	Course Title	Course Hours			Course	Pre	Major
Course Code	Course Title	LEC	PRAC	CRD	Type	requisite	GPA
CSC 103	Computer Programming for Scientists and Engineers	3	2	3	CR		No
ENGL 101	Communication Skills I	3	0	3	CR		No
MATHS 101	Calculus I	3	0	3	CR		No
INTD 110	Basic Design I	0	6	3	MR		Yes
INTD 111	Graphics I	0	6	3	MR		Yes

Year 1 - Semester 2

Course Code	Course Title	Co	urse Ho	urs	Course	Pre requisite	Major GPA
Course Code	Course little	LEC	PRAC	CRD	Туре		
ENGL 102	Composition and Reading II	3	0	3	CR	ENGL 101	No
ISLM 101	Islamic Culture	3	0	3	UR		No
MATHS 102	Calculus II	3	0	3	CR	MATHS 101	No
INTD 120	Basic Design II	0	6	3	MR	INTD 110 & INTD 111	Yes
INTD 121	Graphics II	0	6	3	MR	INTD 111	Yes

Year 2 - Semester 3

Course Code	Course Title	Cou	ırse Hou	ırs	Course	Pre requisite	Major
Course Code	Course Title	LEC	PRAC	CRD	Туре		GPA
INTD 210	Interior Design I	0	8	4	MR	INTD 120 & INTD 121	Yes
INTD 211	History and Theory of Interiors I	3	0	3	MR	INTD 120	Yes
INTD 212	Computer Aided Drafting	1	4	3	MR	INTD 121	Yes
INTD 213	Presentation Techniques	0	4	2	MR	INTD 120 & INTD 121	Yes
INTD 216	Color in Interiors	1	2	2	MR	INTD 120	Yes
PHYCS 107	Physics for Building Design	3	0	3	MSR		No

Year 2 - Semester 4

Course Code	Course Title	Course Hours	urs	Course	Pre	Major	
Course Code	Course Title	LEC	PRAC	CRD	Type	requisite	GPA
INTD 220	Interior Design II	0	8	4	MR	INTD 210 & ENGL 102	Yes
INTD 221	History and Theory of Interiors II	3	0	3	MR	INTD 211	Yes
INTD 222	Materials and Methods of Construction I	3	0	3	MR	INTD 121 & MATHS 101	Yes
INTD 223	Computer Aided Interior Design	1	4	3	MR	INTD 212	Yes
INTD 224	Textiles	3	0	3	MR	INTD 210	Yes
HRLC 107	Human Rights	2	0	2	UR		No

Year 3 - Semester 5

Course Code	Course Title	Co	Course Hours			Pre	Major
Course Code	Course Title	LEC	PRAC	CRD	Туре	requisite	GPA
INTD 310	Interior Design III	0	8	4	MR	INTD 220	Yes
INTD 311	History of Islamic Interiors	3	0	3	MR	INTD 221	Yes
INTD 312	Materials and Methods of Construction II	3	0	3	MR	INTD 222	Yes
INTD 313	Environmental Control Systems I	3	0	3	MR	INTD 220 & PHYCS 107	Yes
INTD 314	Computer Animations	1	4	3	MR	INTD 223	Yes
INTD 324	Furniture Design	1	2	2	MR	INTD 220	Yes

Year 3 - Semester 6

Course Code	Course Title	Course Hours			Course	Pre	Major
Course Code	Course ritte	LEC	PRAC	CRD	Type	requisite	GPA
INTD 320	Interior Design IV	0	8	4	MR	INTD 310	Yes
INTD 322	Working Drawings	0	8	4	MR	INTD 223 & INTD 312	Yes
INTD 323	Environmental Control Systems II	3	0	3	MR	INTD 313	Yes
INTD 326	Design, Culture, and Environment	3	0	3	MR	INTD 310	Yes
PSYC 103	Introduction to Psychology	3	0	3	MSR		No

## **Training Requirement**

Course Code	Course Title		Course	Pre	Major		
	Course Title		PRAC	CRD	Туре	requisite	GPA
INTD 325	Interior Design Training	0	0	0	MR- Training	Completion of 85 Credits	No

### Year 4 - Semester 7

Course Code	Course Title	Course Hours	Course	Pre	Major		
	Course Title	LEC	PRAC	CRD	Type	requisite	GPA
INTD 410	Interior Design V	0	10	5	MR	INTD 320	Yes
INTD 411	Graduation Project – Programming Stage	3	0	3	MR	INTD 320	Yes
INTD 413	Management in Interior Design	3	0	3	MR	INTD 320	Yes
INTD 41X	Major Elective I from list 1	Х	Х	3	ME	INTD 310	Yes
INTD 424	Interior Finishes	3	0	3	MR	INTD 312	Yes

## Year 4 - Semester 8

Course Code	Course Title	Course Hours	Course	Pre	Major		
	Course ritte	LEC	PRAC	CRD	Type	requisite	GPA
INTD 420	Graduation Project – Design Stage	0	12	6	MR	INTD 410 & INTD 411	Yes
INTD 422	Professional Practice and Documentation	3	0	3	MR		Yes
HIST 122	Modern History of Bahrain and Citizenship	3	0	3	UR		No
ARAB 110	Arabic Language Skills	3	0	3	UR		No
INTD 42X	Major Elective II from list 2	Х	Х	3	ME		Yes

# **Major Elective Coures**<sup>1</sup>

 $<sup>^{\</sup>rm 1}$  Student must choose two elective courses from Major Elective Courses list..

	Course Title	Course Hours			Course	Pre	Major		
Course Code		LEC	PRAC	CRD	Туре	requisite	GPA		
	List 1								
INTD 414	Social and Cultural Factors in Design	3	0	3	ME	INTD 310	Yes		
INTD 415	Interior Planting and Courtyard Design	3	0	3	ME	INTD 310	Yes		
INTD 416	Architectural Design	2	2	3	ME	INTD 310	Yes		
	List	2							
INTD 425	Islamic Ornamentation	3	0	3	ME	INTD 320	Yes		
INTD 427	Special Topics in Interior Design	2	2	3	ME	INTD 320	Yes		

### **Course Description**

Course Code: INTD 110 Course Title: Basic Design I

Role of design basics in interior design context. Design elements: point, line, shape, form, space, color, texture, and light. Design principles: proportion, harmony, rhythm, emphasis, dominance, focal point, balance, and unity. Spatial relationships: space within a space, adjacent spaces, interlocking spaces, spaces linked by a common space. Types of design organizations: centralized, linear, clustered, radial, and grid. Two and three dimensional design problems emphasizing creative thinking and processing the given information.

Course Code: INTD 111 Course Title: Graphics I

Use of drafting tools and equipment, graphic symbols and lettering, drawing fundamentals, projection systems, orthographic projection, axonometric and isometric projections, application of projection techniques for the production of architectural drawing (plans, sections, elevations), dimensioning, sketching.

Course Code: INTD 120 Course Title: Design Basics II

Color systems (color wheels). Properties of color, color principles. Texture: tactile and visual. Visual perception of colors and textures. Relationships and differences between abstract and functional design. Functional definition of a space: identifying users' activities and requirements. Movement through space and /or space groups. Space requirements for activities, circulation, furniture and equipment. Functional relationships among activity areas and/or spaces. Two and three dimensional design alternatives for simple interiors and space groups. Emphasis placed on creativity, conceptual thinking and implementation of given information in both design basics courses.

Course Code: INTD 121 Course Title: Graphics

Principles of perspective drawing, representation of interiors with the aid of manual perspective drawing techniques (one and two points perspectives), shade and shadows in plans, elevations, and perspectives, conceptual drawings.

Course Code: INTD 210 Course Title: Interior Design I

Interior design of a simple space. Introduction to programming; functional analysis, anthropometrical and ergonomic requirements, area requirements, circulation requirements and furniture arrangement, treatment of interior surfaces.

**Course Code:** INTD 213 **Course Title:** Presentation Techniques

Focus on oral and visual presentation skills needed in the interior Architecture profession. Exploration of basic rendering techniques for different materials in floor plans, elevations, and perspectives. Color rendering of hand drawn and digital images.

Course Code: INTD 212 Course Title: Computer Aided Drafting

Introductory course in computer aided drafting. Use of AutoCAD software effectively to create computer-generated floor plans, elevations, and details that meet current professional standards. Use of Photoshop software to represent complete 2D CAD drawings with appropriate materials and rendering

Course Code: INTD 211 Course Title: History and Theory of Interiors I

Survey of interiors from pre-history cave settlements until the European Renaissance; emphasis is placed on the relationship between the social, economic, political, and environmental factors, and the formation of architecture, interior spaces, interior surfaces, furniture, and ornamentation.

Course Code: INTD 216 Course Title: Color in Interior

Use of color in interiors. Emphasis on color theory, psychology of color and its effects on moods. Application of color in interior environments with lighting conditions.

Course Code: INTD 220 Course Title: Interior Design II

Design principles, organization and spatial relationship patterns. Analysis of the structure (load bearing system) of given building. Study of function, ergonomics and circulation. Development of design criteria and design concept. Functional relationships among spaces, and spatial planning. Color applications. Medium size projects of medium complexity of commercial facilities.

#### Course Code: INTD 221 Course Title: History and Theory of Interiors II

Survey of interiors from Baroque period to present; emphasis is placed on the relationship between the social, economic, political, and environmental factors, and the formation of architecture, interior spaces, interior surfaces, furniture, and ornamentation; presentation of theoretical discourse during the Nineteenth and Twentieth Centuries, leading to contemporary interiors design directions.

#### Course Code: INTD 222 Course Title: Materials and Methods of Construction I

Introduction to structures as building sub-systems. Structural loads, basic states of structural stresses and forces. Structural systems and components: framed systems (columns, beams, slabs, and footings), bearing walls systems (walls, slabs, strip foundation), trussed systems, space frames, geodesic domes, arches, vaults, tents, pneumatic systems, shells and folded plates. Structural materials (reinforced concrete, metals, brick, concrete blocks, stone, and timber).

#### **Course Code:** INTD 223 **Course Title:** Computer Aided Interior Design

Continuation of INTA 212 with emphasis on three dimensional AutoCAD drawing and modeling techniques. 3D Max visualization software. Use of the software to think in three dimensions, creation of 3D objects, standard drafting versus 3D techniques. Presentation of interiors as picture images and design prints enhanced by advanced Photoshop rendering and lighting techniques.

#### Course Code: INTD 224 Course Title: Textiles

Classification of textiles according to origin of their basic materials (natural fibers, manmade fibers, yarns, etc.). Fabric structure, fabric design (motifs, textures, layout, color application), fabric selection criteria and application for different uses. Specifications, and purchase order writing.

#### Course Code: INTD 310 Course Title: Interior Design III

Design Project focus on: Analysis of the structure of given building. Programming. Development of design concept and criteria. Selection of interior finishes, textiles, furniture and styles. Furniture arrangements and interior surface treatments. Projects of medium size with medium complexity for hospitality and educational facilities.

#### Course Code: INTD 311 Course Title: History of Islamic Interiors

Survey of Islamic interiors including examples from Umayyad, Abbasid, Moorish, Mogul, and Ottoman periods; emphasis on mosque and residential architectural types; Islamic ornamentation and calligraphy; influence of cultural and religious factors on Islamic interiors.

#### Course Code: INTD 312 Course Title: Materials and Methods of Construction II

Introduction to non-structural building sub-systems. Types of non-structural walls and partitions, windows, doors, stairs, ramps, and suspended ceilings. Related building materials (brick, concrete blocks, reinforced concrete, timber, metal, and plastic).

#### Course Code: INTD 314 Course Title: Computer Animations

Introduction to digital animation. Concepts, theory, and aesthetics of digital design and animation, creating 2D elements and 3D models, applying surface materials, lighting, animation and rendering scenes. Video editing software (eg. Adobe Premier or Windows Movie Maker) may be used.

#### **Course Code:** INTD 313 **Course Title:** Environmental Control Systems I

Classification of environmental control systems. Passive climate control: thermal comfort conditions, heat transfer through walls and floors, selection of interior surface finishes in accordance with heat control, orientation of rooms with regard to solar radiation and wind control, air quality and natural ventilation. HVAC systems: their function, components, and system layouts. Illumination systems: visual comfort, day lighting, artificial lighting: light sources, lighting fixtures, lighting systems, lighting systems design and selection of interior finishes in accordance with required light reflectance. Integrated lighting.

#### **Course Code:** INTD 324 **Course Title:** Furniture Design

Emphasis on innovation and creativity in the design of functional and aesthetically pleasing pieces of furniture. Appropriate materials and forms for the construction of custom furniture for specific uses. Detailing of custom furniture considering sustainable alternatives.

Course Code: INTD 325 Course Title: Interior Design Training

Each student must participate in training program in the relevant industry where he is expected to gain practical experience.

Course Code: INTD 320 Course Title: Interior Design IV

Emphasis on technical issues such as structures (strength and stability), characteristics of finishes, lighting and air conditioning systems. With regard to functional and aesthetical satisfaction, integration of the layouts of air diffusers, absorbers and lighting fixtures with furniture arrangement, floor and wall patterns and treatments. Projects of large scale with high level complexity for corporate and institutional facilities.

Course Code: INTD 322 Course Title: Working Drawings

Production of working drawing set for small projects. Detailing: connections of external wall and floor, connections of external wall and roofs, windows, external and internal doors, stairs, cabinetry. Structural plan and sections. Furniture, fixture and equipment organization plans and sections. Floor and wall tiling plan and elevations. Electrical, HVAC and plumbing layouts. Reflected ceiling plan (integration of lighting fixtures, air diffusers and absorbers, smoke sensors and sprinklers).

Course Code: INTD 323 Course Title: Environmental Control Systems II

Room acoustics, aural comfort, reverberation time and good hearing criteria for rooms of special purposes. Noise control. Selection of finishes in accordance with sound absorption and required reverberation time. Fire control. Passive fire control: escape routes, fire exits, compartmentation. Firefighting systems and equipment. Sanitary installations.

**Course Code:** INTD 326 **Course Title:** Design, Culture and Environment

Examination of the interrelationship among culture, environment, and design; issues of sustainability, globalization, identity, culture, and human behavior are addressed as forces in the formation of contemporary interiors; issues are discussed at both local and international scales.

Course Code: INTD 410 Course Title: Interior Design V

Comprehensive design with emphasis on socio-cultural and technical issues such as build-ability, sustainability, acoustics, noise control, firefighting and plumbing systems. Projects of large scale with high level complexity for Hospitality, Socio Cultural and Health care facilities.

**Course Code:** INTD 411 **Course Title:** Graduation Project- Programming Stage

Preparation of graduation project report to include the identification of graduation project, selection of interior spaces for the project, theoretical studies related to the topic of the project, analysis of users' characteristics and needs, development of project's program and functional relationships, identifying conceptual directions for the design, discussion of spatial qualities, color schemes, furniture, materials, and surface treatments appropriate for the project.

**Course Code:** INTD 413 **Course Title:** Management in Interior Design

Planning, organizing and control of interior Architecture projects. Methods of task break-down, scheduling, cost analysis and cost estimation. Writing specifications. Types of bidding and preparation of bid documents. Facility management concerns in interior Architecture.

**Course Code:** INTD 424 **Course Title:** Interior Finishes

Criteria for selection of finishes (durability, fire resistance, humidity resistance, heat storage, easy cleaning and maintenance, sound absorption and noise control, light reflection, prevention of air pollutants and mites). Wall finishes (brick and stone veneer, precast concrete, gypsum boards, ceramics, GRC, metals, wood, glass, plaster, paint), floor finishes (stone, ceramics, plastic tiling, wood parquet, terrazzo, carpeting), ceiling (plasters, paint, wood, suspended ceiling materials).

Course Code: INTD 420 Course Title: Graduation Project II (Design Stage)

A comprehensive Interior Design project based on the design program developed in the Programming Stage; project presents a synthesis of information acquired during previous semesters; and an opportunity to exhibit student's abilities as a designer and his/her personal ideology and beliefs in relation to interior Architecture.

Course Code: INTD 422 Course Title: Professional Practice and Documentation

Basic principles, procedures of office systems of interior Architecture, types of professional practices, contracts and letters of agreement, responsibilities, professional ethics, portfolio review and development.

Flectives:

This course is an overview of significant social, cultural and human behavioral factors related to space. Major design problems and the influences of sociocultural issues are analysed in relation to space layout of the buildings. Reading, discussions, films, and empirical case studies/ assignments will focus on understanding different arrangements of spaces that influence social and cultural behaviors of the built environment.

**Course Code:** INTD 415 **Course Title:** Interior Planting and Courtyard Design

Basic principles of garden and courtyard design. Functional, formal, and visual aspects of small open spaces. Interior planting (types, uses, care), composing with plant materials.

Course Code: INTD 416 Course Title: Architectural Design

Definition of Architectural Design. Steps in Architectural Design. Similarities and differences between design processes in Interior Architecture and Architecture. A small size Architectural design project.

Course Code: INTD 425 Course Title: Islamic Ornamentation

Definition and materials of ornamentation. Methods of ornamentation: carving, chiseling, embossing, engraving, painting, gilding, inlaying, marquetry, tapestry and cladding with mosaic, ceramic, brick, gypsum etc. Elements of Islamic ornamentation, motifs and patterns. Classification of motifs and patterns: Vegetal and floral patterns, geometric patterns, figural patterns, calligraphy. Exercises in developing different motifs and patterns.

**Course Code:** INTD 427 **Course Title:** Special Topics in Interior Design

Flexible course in terms of topics in accordance with interests of faculty and students. Structured individually by instructors to provide special opportunities to explore specific topics in interior Architecture. Course topic subject to Program Council approval.

LIBERAL ARTS COURSES

**Course Code:** PHYCS 107 **Course Title:** Physics for Building Design

Fundamentals of heat transfer through building envelope: Air to air heat transmittance (U), internal and external surface conductance (h), thermal conductivities of building materials (k). Relationships between interior finishing materials and (U) values.

Nature of light, light transmission, reflection and absorption. Basic properties of light (photometric quantities): Light intensity (I), luminous flux (Ix), illumination level (E), luminance (L). Photometric laws: Abney's law, inverse square law, cosine law.

Nature of sound: Audible sounds. Sound quantities: Sound intensity level (I) and sound pressure level (p). Sound reflection and absorption in enclosed spaces. Reverberant sound and reverberation time (RT). Sound transmissions through partitions and building envelope. Sound reduction index.

Course Code: PSYC 103 Course Title: Introduction to Psychology

Principles and basic understanding in different psychology fields: behavior biological foundation, growth principles, education, motivation, reactions, comprehension, character, social aspects of behavior, tension and psychological health.

## **College Requirement Courses Descriptions**

Introduction to computers, their uses, development, components, hardware, and software. Internal representation and numbering systems. Algorithmic problem solving principles. Introduction to a modern programming language (e.g. C++). Input/Output, conditional statements, iteration, files, strings, functions and arrays. Lab assignments to practice programming.

Course Code: ENGL 101 Course Title: Communication Skills I

This course focuses on reading skills and strategies and language development. The reading section concentrates on high-interest contemporary topics and encourages students to increase speed and efficiency. The writing component, integrated to the reading materials, reviews grammatical structures, develops language accuracy and introduces paragraph writing. Students are required to upgrade their grammar, reading, and listening skills on the internet.

Course Code: ENGL 102 Course Title: Composition and Reading II

A continuation of English 101 which further develops the students' skills in reading and writing. The course exposes students to wider range of reading material aimed at developing their understanding of different styles of English.

Course Code: MATHS 101 Course Title: Calculus I

Algebra. Functions and graphs. Trigonometry. Conic sections. Limits and continuity. Derivatives and integrals. Applications of derivatives which include mean value theorem, extrema of functions and optimization. Definite integrals and the Fundamental Theorem of Calculus.

Course Code: MATHS 102 Course Title: Calculus II

Applications of definite integrals, including areas, volumes and surface areas of solids of revolution, arc length and centroids. Transcendental functions, indeterminate form and L'Hopital's Rule. Techniques of integration and improper integrals. Infinite series, power series. Maclaurin and Taylor Theorem.

# **University Requirements Courses Descriptions**

Course Code: ARAB 110 Course Title: Arabic Language Skills

This course focuses on basic Arabic skills including form, function, and meaning. It also helps the student to appreciate and understand structures and approach them from a critical point of view, through various genres in literature.

**Course Code:** HIST 122 **Course Title:** Modern History of Bahrain and Citizenship

Spatial identity of Bahrain: Brief history of Bahrain until the 18th century; the historical roots of the formation of the national identity of Bahrain since the 18th century; the modern state and evolution of constitutional life in Bahrain; the Arabic and Islamic dimensions of the identity of Bahrain; the core values of Bahrain's society and citizenship rights (legal, political, civil and economic); duties; responsibilities and community participation; economic change and development in Bahrain; Bahrain's Gulf, Arab and international relations.

Course Code: HRLC 107 Course Title: Human Rights

This course deals with the principles of human rights in terms of the definition of human rights, scope, sources with a focus on the International Bill of Human Rights; The Charter of the United Nations; Universal Declaration of Human Rights; The International Covenant on Economics, Social and Culture rights; Convention against Torture and other Cruel, Inhuman or Degrading Treatment or Punishment; Mechanics and the Constitutional Protection of Rights and Public Freedoms in Kingdom of Bahrain.

Course Code: ISLM 101 Course Title: Islamic Culture

An introduction to the general outline and principles of Islamic culture, its general characteristics, its relationships with other cultures, general principles of Islam in beliefs, worship, legislation and ethics.