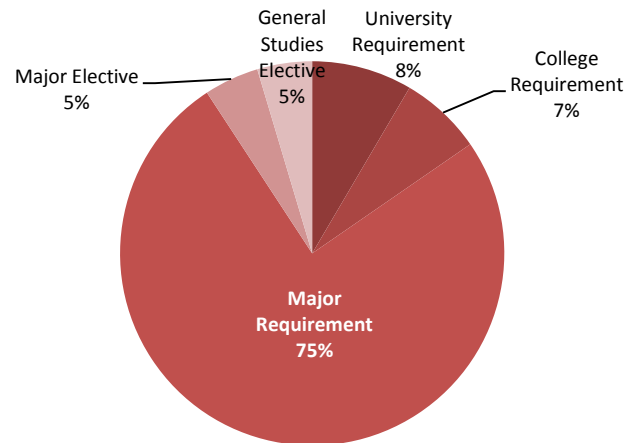


Bachelor of Landscape Architecture 2018

Program Components

| Course Type | CRD |
|---|------------|
| University Requirement (UR) | 11 |
| College Requirement (CR) | 9 |
| Major Requirement (MR) | 98 |
| Major Elective (ME) ¹ | 6 |
| General Studies Elective (GSE) ² | 6 |
| Training (Yes) | 1 |
| Total Credit (CRD) | 130 |



¹ Student must choose two elective courses from Major Elective Courses list.

² Student must choose two elective courses from General Studies Elective Courses list.

Detailed Study Plan

Year 1 - Semester 1

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|-----------------------------------|--------------|------|-----|-------------|---------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 110 | Design Theories and Practice | 0 | 6 | 3 | MR | ---- | Yes |
| LNDA 111 | Design Communication I | 0 | 6 | 3 | MR | ---- | Yes |
| LNDA 112 | Site Studies | 1 | 2 | 2 | MR | ---- | Yes |
| MATHS 106 | Mathematics for Built Environment | 3 | 0 | 3 | CR | ---- | No |
| ARAB 110 | Arabic Language Skills | 3 | 0 | 3 | UR | ---- | No |
| ENGL 101 | Communication Skills | 3 | 0 | 3 | CR | ---- | No |

Year 1 - Semester 2

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|----------------------------|--------------|------|-----|-------------|---------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 120 | Visual and Spatial Design | 0 | 6 | 3 | MR | LNDA 110 | Yes |
| LNDA 121 | Design Communication II | 0 | 6 | 3 | MR | LNDA 111 | Yes |
| LNDA 122 | Plants in the Gulf Region | 1 | 2 | 2 | MR | LNDA 112 | Yes |
| GSE XXX | General Studies Elective I | X | X | 3 | GSE | ----- | No |
| ENGL 102 | Composition and Reading | 3 | 0 | 3 | CR | ENGL 101 | No |
| HRLC 107 | Human Rights | 2 | 0 | 2 | UR | ----- | No |

Year 2 - Semester 3

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|---|--------------|------|-----|-------------|---------------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 210 | Landscape Design I | 0 | 8 | 4 | MR | LNDA 120 & LNDA 121 | Yes |
| LNDA 211 | Theories of Landscape Architecture | 3 | 0 | 3 | MR | LNDA 120 & ENGL 102 | Yes |
| LNDA 212 | Geography and Landscape | 2 | 0 | 2 | MR | LNDA 112 & LNDA 122 | Yes |
| LNDA 213 | Materials and Construction I | 1 | 2 | 2 | MR | LNDA 111 | Yes |
| LNDA 214 | Computer Aided Design I | 1 | 4 | 3 | MR | ----- | Yes |
| LNDA 215 | General Botany and Horticulture for Landscape | 2 | 0 | 2 | MR | LNDA 112 | Yes |

Year 2 - Semester 4

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|-----------------------------------|--------------|------|-----|-------------|---------------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 220 | Landscape Design II | 0 | 8 | 4 | MR | LNDA 210 & LNDA 122 | Yes |
| LNDA 221 | History of Landscape Architecture | 2 | 0 | 2 | MR | LNDA 211 | Yes |
| LNDA 222 | Environment and Sustainability | 3 | 0 | 3 | MR | LNDA 212 | Yes |
| LNDA 223 | Materials and Construction II | 1 | 2 | 2 | MR | LNDA 213 | Yes |
| LNDA 224 | Computer Aided Design II | 1 | 4 | 3 | MR | LNDA 214 | Yes |
| LNDA 225 | Human Factors of Design | 2 | 0 | 2 | MR | LNDA 215 | Yes |

Year 3 - Semester 5

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|----------------------------------|--------------|------|-----|-------------|---------------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 310 | Landscape Design III | 0 | 8 | 4 | MR | LNDA 220 | Yes |
| LNDA 311 | Urban Studies | 3 | 0 | 3 | MR | LNDA 221 | Yes |
| LNDA 312 | Urban Agriculture | 2 | 0 | 2 | MR | LNDA 215 & LNDA 222 | Yes |
| LNDA 313 | Working Drawings | 0 | 4 | 2 | MR | LNDA 223 | Yes |
| LNDA 314 | Geographical Information Systems | 1 | 2 | 2 | MR | LNDA 214 & LNDA 220 | Yes |
| ISLM 101 | Islamic Culture | 3 | 0 | 3 | UR | ----- | No |

Year 3 - Semester 6

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|---|--------------|------|-----|-------------|---------------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 320 | Landscape Design IV | 0 | 8 | 4 | MR | LNDA 310 & LNDA 314 | Yes |
| LNDA 321 | Design Culture and Environment | 3 | 0 | 3 | MR | LNDA 222 & LNDA 311 | Yes |
| LNDA 322 | Water and Soil Management | 2 | 0 | 2 | MR | LNDA 312 | Yes |
| LNDA 323 | Outdoor Furniture Design | 0 | 4 | 2 | MR | LNDA 313 | Yes |
| LNDA 324 | Design Implementation | 2 | 0 | 2 | MR | LNDA 313 | Yes |
| HIST 122 | Modern History of Bahrain and Citizenship | 3 | 0 | 3 | UR | ----- | No |

Training Requirement

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|-----------------------|--------------|------|-----|-------------|---------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 399 | PROFESSIONAL TRAINING | | | 1 | MR | 85 Credits | No |

Year 4 - Semester 7

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|---|--------------|------|-----|-------------|---------------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 410 | Landscape Design V | 0 | 8 | 4 | MR | LNDA 320 | Yes |
| LNDA 411 | Graduation Project I - Research and Programming | 2 | 2 | 3 | MR | LNDA 320 | Yes |
| LNDA 412 | Lighting and Illumination of Landscapes | 1 | 2 | 2 | MR | LNDA 323 | Yes |
| LNDA 413 | Services in Landscapes | 1 | 2 | 2 | MR | LNDA 313 | Yes |
| LNDA 414 | Contemporary Landscape Architecture | 2 | 0 | 2 | MR | LNDA 221 & LNDA 310 | Yes |
| LNDA xxx | Major Elective I from list 1 | 3 | 0 | 3 | ME | As per list1 | No |

Year 4 - Semester 8

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|-------------|--------------------------------------|--------------|------|-----|-------------|---------------------|-----------|
| | | LEC | PRAC | CRD | | | |
| LNDA 420 | Graduation Project II - Design Stage | 0 | 10 | 5 | MR | LNDA 410 & LNDA 411 | Yes |
| LNDA 421 | Landscape Professional Practice | 3 | 0 | 3 | MR | LNDA 324 | Yes |
| LNDA 422 | Landscape Management | 3 | 0 | 3 | MR | LNDA 413 | Yes |
| LNDA xxx | Major Elective II from list 2 | 3 | 0 | 3 | ME | ----- | No |
| GSE XXX | General Studies Elective II | X | X | 3 | GSE | As per list2 | No |

Major Elective Courses¹

¹ Student must choose two elective courses from Major Elective Courses list..

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite | Major GPA |
|---------------|--|--------------|------|-----|-------------|---------------|-----------|
| | | LEC | PRAC | CRD | | | |
| List 1 | | | | | | | |
| LNDA 415 | Courtyard Design | 3 | 0 | 3 | ME | LNDA 321 | No |
| LNDA 416 | Neighbourhood Design | 3 | 0 | 3 | ME | LNDA 225 | No |
| LNDA 417 | Computer Animations | 3 | 0 | 3 | ME | LNDA 224 | No |
| List 2 | | | | | | | |
| LNDA 423 | Advanced Building Technologies | 3 | 0 | 3 | ME | LNDA 313 | No |
| LNDA 424 | Islamic Gardens | 3 | 0 | 3 | ME | LNDA 321 | No |
| LNDA 425 | Special Topics in Landscape Architecture | 3 | 0 | 3 | ME | LNDA 414 | No |

General Studies Elective Courses¹

| Course Code | Course Title | Course Hours | | | Course Type | Pre requisite |
|-------------|------------------------------|--------------|------|-----|-------------|---------------------|
| | | Lec | Prac | CRD | | |
| PSYC 103 | Introduction to Psychology | 3 | 0 | 3 | GSE | ----- |
| SOCIO 161 | Introduction to Sociology | 3 | 0 | 3 | GSE | ----- |
| SOCIO 181 | Introduction to Anthropology | 3 | 0 | 3 | GSE | ----- |
| FA 121 | Artistic Photography (1) | 2 | 2 | 3 | GSE | ----- |
| FA 312 | Still Life | 1 | 4 | 3 | GSE | ----- |
| FA 316 | Islamic Art | 3 | 0 | 3 | GSE | ----- |
| GSE XXX | Other electives | X | X | 3 | GSE | Department Approval |

Course Description

Course Code: LNDA 110 **Course Title:** Design Theories and Practice

Introduction to design as a process of organizing forms and spaces based on theoretical ideas, philosophies and fundamental design principles. Introduce types of spatial relationships. Produce simple design outcomes in terms of visuals, forms and spaces.

Course Code: LNDA 111 **Course Title:** Design Communication I

Introduction to drawings, visuals and models as representation of ideas and objects. Sketching as exploration of ideas. Standard drawing scales, symbols codes and techniques to produce graphical representations of outdoor built-environments. Special focus on representation of plants.

Course Code: LNDA 112 **Course Title:** Site Studies

Introduction to land as terrain defined by visible and invisible boundaries. Interpretations of site conditions determining the surface configuration, contour lines, dimensions and site features from geological, environmental and perceptual dimensions. Maps as representations. Techniques of mapping sites.

Course Code: LNDA 120 **Course Title:** Visual and Spatial Design

Introduce colors, shapes and forms leading to graphic design, and object design employing fundamental principles of design. Introduce Design Process followed by the design of Posters, Brochures, book covers, logos etc., as well as structures to promote design consciousness and skill.

Course Code: LNDA 121 **Course Title:** Design Communication II

Introduction to drawings and models as communication media; three-dimensional representations through perspectives, & models. Production of manual, and other digital media to communicate design ideas.

Course Code: LNDA 122 **Course Title:** Plants in the Gulf Region

Introduction to native vegetation and plants in the Gulf region and those imported and nurtured in both controlled and open areas. Native plant communities and yard planting, plant growth, plant materials and floriculture. Produce a record of plant studies with visuals and written material.

Course Code: LNDA 210 **Course Title:** Landscape Design I

Introduction to Landscape Architecture followed by the design of a small residential landscape taking into account site conditions, needs of a family, environment and appropriate technologies. Application of learned skills in Design Theories and Practice, Visual Design, Design Communication I & II.

Course Code: LNDA 211 **Course Title:** Theories of Landscape Architecture

Introduction to theories and philosophies relevant to landscape architecture. Approaches to space, form and place making in the open. Methods and techniques of definition of outdoor rooms by physical and non-physical means. Celebrated architects and their approaches to landscape settings.

Course Code: LNDA 212 **Course Title:** Geography and Landscape

Introduction to geography of the land. A natural landscape as a collection of landforms, such as mountains, hills, plains, and plateaus, lakes, streams, soils and natural vegetation and how to transform them to built-ones. Focus on desert landscape. Introduce cultural landscapes: city as a built-landscape.

Course Code: LNDA 213 **Course Title:** Materials and Construction I

Analysis of 'construction' as a process. Introduction of principal types of construction materials such as, timber, stone, metals and concrete and other materials and their technologies that are generally applicable to the construction of landscape settings. Focus on details of joinery.

Course Code: LNDA 214 **Course Title:** Computer Aided Design I

Applying standard computer programs widely used in the market to produce models and create working drawings. Current and potential digital applications of computers in the design profession.

Course Code: LNDA 215 **Course Title:** General Botany and Horticulture for Landscape

Introduce seeds, plant growth, development and anatomy; basic concepts of how photosynthesis, respiration and environmental factors affect growth and development; understanding of how plants grow in a natural setting versus a human-made environment. Emphasis on understanding plant biology.

Course Code: LNDA 220 **Course Title:** Landscape Design II

Design of a complex recreational landscape taking into account site conditions, needs of an institution such as a hotel, the environment and appropriate technologies. Emphasize on the creation of outdoor rooms and places; definitions by built-elements, levels, structures and objects.

Course Code: LNDA 221 **Course Title:** History of Landscape Architecture

The concepts underlying the production of and evolution of landscapes from the ancient to the modern era. Environmental and human factors affecting the evolution of the built environment and landscape developments. Emphasis on evaluating conceptual, formal and performative aspects of landscapes.

Course Code: LNDA 222 **Course Title:** Environment and Sustainability

Social, environmental, and economic sustainability related to landscapes within a global context. Problem-solving strategies within an interdisciplinary team environment. Landscape as a carbon sink and its role in the mitigation of the impact of manmade structures, systems and their behaviours.

Course Code: LNDA 223 **Course Title:** Materials and Construction II

Analysis of construction systems for site work: soils, excavation, slope retention and drainage. Small-structures: foundations, basements. Superstructure: masonry bearing wall construction, steel and concrete framing, stairs, ramps, bridges and walkways.

Course Code: LNDA 224 **Course Title:** Computer Aided Design II

Applying standard computer programs widely used in the market to produce three-dimensional images. Current and potential digital applications of computers such as 3D printing and their use in the design profession.

Course Code: LNDA 225 **Course Title:** Human Factors in Design

Introduce the functional, social, cultural and experiential relations people have with natural and built landscapes. Theoretical notions of territoriality; personal space and life style. Designing for community, privacy, and safety; perception and recognition of urban form; Design theories for the sensory environment.

Course Code: LNDA 310 **Course Title:** Landscape Design III

Design of a complex urban landscape taking into account social needs, site conditions, routes and spatial props, the environment and technologies. Emphasize on the creation of large-scale outdoor rooms, routes and places for multi-faceted social activities; definitions by levels, structures and objects.

Course Code: LNDA 311 **Course Title:** Urban Studies

Introduction to urban design; relations between urban design and urban landscapes. City as a landscape and a system of places. Landscape as outdoor rooms; enabling place. Urban design principles and practices as relevant to landscape design.

Course Code: LNDA 312 **Course Title:** Urban Agriculture

Introduce the emerging model for alternative urban land use where people grow food, work together, take care of the land, and build community. Urban Farm as a place and a process, integrating biological, ecological, economic and social concerns. Engage students to learn by doing, working in an agriculture setting.

Course Code: LNDA 313 **Course Title:** Working Drawings

Introduction to techniques and graphical conventions used in working drawings to produce plans, elevations, sections, and construction details of landscape settings. Implement a previous design by means of working details for construction to include specifications of constructions and service layouts.

Course Code: LNDA 314 **Course Title:** Geographical Information Systems

Introduce the hardware and software components of a Geographic Information System and reviews GIS applications. Data structures and basic functions, methods of data capture and sources of data, and the nature and characteristics of spatial data and objects. Introduce typical operations, products/applications.

Course Code: LNDA 320 **Course Title:** Landscape Design IV

Design of a complex urban landscape outside Bahrain taking into account, culture, beliefs, social needs, site conditions, existing structures, routes, spatial props, the environment and technologies. Emphasize on the cultural and environmental differences in the creation of outdoor rooms, routes and places.

Course Code: LNDA 321 **Course Title:** Design Culture and Environment

Introduce the relations between culture and the design of the built environment. The impacts of culturally distinct behaviors, relationships and life-styles on the built-environment. Discuss how they have resulted in unique/ native landscapes, examined through Indigenous Bahrain, and other cultures.

Course Code: LNDA 322 **Course Title:** Water and Soil Management

Introduce water and soil interrelationship in maintaining health of natural landforms, and the impact of paving and manmade structures. Soil as the nutrient and deliverer of water to give plants structural support. Introduce controlling water flow over and through the earth's surface.

Course Code: LNDA 323 **Course Title:** Outdoor Furniture Design

Introduce furniture design: man-object interface and ergonomics. Design of innovative, socially relevant, and symbolically meaningful built-elements in different landscape settings. Emphasis on Joinery, finishes and maintenance of furniture through articulation of details.

Course Code: LNDA 324 **Course Title:** Design Implementation

Concepts of project management, project delivery and project life cycle. Life cycle of projects from planning to tendering and construction. Types of Contracts. Construction drawings, specifications and bills of quantities. Tender documents and tender evaluations. Contract documents. Laws and regulations.

Course Code: LNDA 399 **Course Title:** Professional Training

This course exposes the students to the real world to gain practical experience in working in a professional practice involving in design, detailing and supervision of landscape projects.

Course Code: LNDA 410 **Course Title:** Landscape Design V

Design of a small landscape on a high-rise building taking into account social needs, building conditions, the environment and technologies. Emphasize on the creation of urban landscape as an outdoor space above ground as roof gardens. Apply learned skills in Design Theories and Practice & Visual Design.

Course Code: LNDA 411 **Course Title:** Graduation Project I - Research and Programming

Development of a landscape design project outline. Conducting research and preparing a program for a landscape with its pertinent goals, user's needs and activities to accommodate people, communities and their needs. The program must articulate functional, human, technical, and environmental factors.

Course Code: LNDA 412 **Course Title:** Lighting and Illumination of Landscapes

Introduce the use of outdoor illumination of private gardens and public landscapes for the enhancement and purposes of safety, nighttime aesthetics, accessibility, security, recreation and sports and social and event uses. Techniques and technologies, types of fixtures, and their use & maintenance.

Course Code: LNDA 413 **Course Title:** Services in Landscapes

Introduction to the services and infrastructure for landscapes: Water supply and drainage systems. Garbage collection and disposal, access for maintenance and services for management of landscapes, Security, alarm systems, safety, lighting and surveillance.

Course Code: LNDA 414 **Course Title:** Contemporary Landscape Architecture
Contemporary ideas and movements related to Landscape architecture. Factors affecting the form of the present day built environments and urban developments. Analysis of contemporary landscapes to understand the theoretical basis underlying the accomplishments and movements.

Course Code: LNDA 420 **Course Title:** Graduation Project II; Design Stage
Final design studio. Students employ theoretical and philosophical basis to generate ideas to address specific issues of the site and produce a creative landscape design on the basis of the program prepared in Graduation Project I.

Course Code: LNDA 421 **Course Title:** Landscape Professional Practice
Introduce principles of landscape architectural professional practice, standards and codes, with a focus on delivery of landscape services. Preparation for professional practice within the business of landscape architecture in private and public arenas in Bahrain.

Course Code: LNDA 422 **Course Title:** Landscape Management
Introduction to management of landscape. Planning resources, labour, replenishment and maintenance of sites. Post-Occupancy evaluations and how to respond to evolving needs of communities, technologies and administrative practices, in the context of shifting labour, resources and systems.

Professional Electives

LNDA XXX

Course Code: LNDA 415 **Course Title:** 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: LNDA 416 **Course Title:** Neighbourhood 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: LNDA 417 **Course Title:** Computer Animations
Introduction to the production of different animated landscape design presentations using advanced digital software.

Course Code: LNDA 423 **Course Title:** Advanced Building Technologies
Advanced green technologies and review of contemporary materials and methods in manufacturing building components and their assembly on site. production trends such as; system building and smart building systems in design.

Course Code: LNDA 424 **Course Title:** Islamic Gardens
This course introduces gardens of the Islamic World and their formal design and aesthetic experiences related to religious, social, political, cultural, geographic, and environmental contexts and their implication on landscape design. It discusses history, archaeology, conservation and contemporary ideas.

Course Code: LNDA 425 **Course Title:** Special Topics in Landscape Architecture
Any special topic related to landscape Architecture in general as approved by the Department.

College Requirement Courses Descriptions

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 106 **Course Title:** Mathematics and Trigonometry

Introduction to geometry, trigonometry and the applications of these for the design of shapes and surfaces. Vectors in two and three dimensions. Fractal geometry. History and applications of mathematics in design, architecture and landscape.

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.