British Degrees

at **Applied Science University**
in Partnership with
London South Bank University
(Offering Dual Awards)

B.Eng. (Hons) Architectural Design Engineering
B.Eng. (Hons) Civil and Construction Engineering

London South Bank University

ASU
جامعة العلوم التطبيقية
APPLIED SCIENCE UNIVERSITY

London South Bank University

Established as the Borough Polytechnic Institute in 1892, the original aim of London South Bank University (LSBU) was to promote industrial skills, general knowledge, health and well-being of young men and women, which remains remarkably similar today. The University's continuous focus on vocational education and professional opportunity allows to produce graduates who can meet the challenges of today's workplace.

Applied Science University (ASU) strives to become one of the leading universities not only in the Kingdom of Bahrain but also in the entire Gulf region. The University aims at molding human resources by reinforcing theoretical knowledge with the necessary practical skills required for career success in the respective disciplines chosen by its students. By keeping abreast with the developments in science and technology, the University guarantees its students a high quality learning experience, providing them with the leading edge required to excel in today's competitive and global environment.

Dual Awards

In partnership with **London South Bank University (LSBU), UK**, a leading British university, Applied Science University (ASU) is now offering **Dual Award** programmes making it affordable for students to gain internationally recognised British qualifications in Bahrain.Upon successfully completing the programme, students will be awarded **two** degrees, one from ASU and another from LSBU.

Advantages

- Save on the high cost of living and tuition in the UK, live close to your family and friends in Bahrain while earning a British degree.
- Get **two** degrees from studying a **single** programme: One from ASU and another from our partner university.
- Each degree is internationally recognised giving you a competitive advantage in the job market, wherever your career takes you.
- Gain practical knowledge from highly qualified academics with robust professional experience.
- Develop lifelong learning skills. These key competencies and values are sought after by employers domestically and internationally.
- Get a chance to spend your internship in the UK interacting and collaborating with top international firms.
- Gain access to substantial online resources provided by ASU and our partner university.
- Become a global professional.

Entry Requirements

In order to be considered for entry to the programme, applicants are required to have:

- A Bahraini or GCC Secondary School (Scientific) Certificate, or equivalent, with a minimum of 60% GPA* and a 60% in Mathematics and 60% in English language (competency equivalent to IELTS 4.5 or above).

**Candidates with a lower GPA may also be admitted subject to a satisfactory interview by the College.*

Progressing to the second year of the Programme is subject to successfully passing all courses of the first year and demonstrated English competency equivalent to IELTS 5.5 or above.

Programmes

In partnership with **London South Bank University (UK)**, the following programmes will be offered by ASU in the academic year 2016/2017:

1. **B. Eng. (Hons) Architectural Design Engineering**
2. **B. Eng. (Hons) Civil and Construction Engineering**

The following programmes will be offered starting the academic year 2017/2018:

1. **B. Eng. Electronics and Electrical Engineering**
2. **B. Eng. Telecommunications and Networks Engineering**

And, the following programme will be offered starting the academic year 2018/2019:

B. Eng. (Hons) Mechanical and Design Engineering

Each of the **Dual Award** programmes will be of a four-year duration. Each programme is divided into teaching units called courses. Each is assigned 3 Credit Hours weighting. For **Dual Awards**,150 Credit Hours must be accumulated.

Detailed descriptions of the individual courses for each programme may be found in the web pages: **www.asu.edu.bh/engineering.** The aims of the programmes are outlined below, together with their yearly study plans.

B. Eng. (Hons) in Architectural Design Engineering

Objectives of the Programme

- Develop students' core, personal and employability skills, to help them adapt to the changing labour market.
- Utilise the variety of construction professions, to expose students to a multitude of aspects of the construction process, and prepare them for work in multidisciplinary teams.
- Give students a blend of architecture and civil engineering courses, exploring the form and appearance of buildings, as well as their analysis, design and construction.
- Produce graduates with knowledge, problem-solving skills and practical know-how of the key aspects of architectural and civil engineering, and the creativity and individuality of architecture.
- Produce graduates aware of the whole design process, including design procedures in codes of practice, architectural engineering procedures, project management, quality issues, finance, ethical conduct, environmental issues and health and safety.
- Produce graduates who can work in multidisciplinary design practices and provide a link between engineering and architecture professionals.
- Provide graduates with the necessary academic qualifications which will provide the full educational base for a successful career in the industry.

Distinctive Features of the Programme

This programme is intended for undergraduate students who wish to study the discipline of Architectural Design Engineering to Honours degree level and who may wish to achieve professional status later on. This programme is designed to embrace developments in the industry, in particular the Engineering Council, UK (ECUK) Standard for Professional Engineering Competence (UK-SPEC).

Study Plan

Year 1 (Level 3): Total Credit Hours = 42	
Semester 1	Semester 2
1. Mathematics 1	6. Engineering Science 2
2. Intermediate English	7.Computer Programming for Engineering
3. Principles of Engineering	8. Mathematics 2
4. Engineering Science 1	9. Constructing the Built Environment
5. Study Skills and Professional Practice	10. Laboratory and Workshop Skills
	11. Advanced English
Summer Semester (Compulsory)	
12. Civilisation and Bahrain History	
13. Human Rights	
14. Arabic Language or English Language for non-Arabic speaking students	

Year 2 (Level 4): Total Credit Hours = 36	
Semester 1	Semester 2
1. Engineering Practice and Design 1	7. Building Technology
2. Engineering Mathematics 1	8. Engineering Practice and Design 2
3. Architectural Engineering Design and Structures 1	9. Engineering Mathematics 2
4. Principles of Engineering Science 1	10. Architectural Engineering Design and Structures 2
5. CAD Graphics	11. Principles of Engineering Science 2
6. Integrated Design and Construction	12. Building Environment Simulation and Analysis
Year 3 (Level 5): Total Credit Hours = 36	
Semester 1	Semester 2
1. Geotechnics 1	7. Building Information Modelling
2. Engineering Management and Economics	8. Architectural Engineering Field Studies
3. Design Procedures for Architecture 1	9. Design Procedures for Architecture 2
4. AutoCAD-3D	10. Structural Design 2
5. Structural Design 1	11. Engineering Ethics
6. Advanced Engineering Mathematics	12. Internship
Year 4 (Level 6): Total Credit Hours = 36	
Semester 1	Semester 2
1. Engineering Research Methods	7. Innovation, Enterprise and Management
2. Forensic Engineering and Conservation	8. Project 2
3. Energy Conservation in Buildings	9. Structural Design and Analysis 2
4. Thermodynamics for Buildings	10. Geotechnics 2
5. Project 1	11. Design Project (6 Credit Hours)
6. Structural Design and Analysis 1	

B.Eng. (Hons) in Civil and Construction Engineering

Objectives of the Programme

- Produce graduates who are committed to a career in civil engineering and construction industry.
- Produce graduates who have a breadth and depth of knowledge and understanding of the key aspects of civil engineering.
- Allow graduates to acquire and develop analytical and problem-solving skills and subject-specific skills, to acquire and develop the ability to evaluate evidence, arguments and assumptions and to communicate effectively.
- Develop graduates who approach design problems creatively and who have the technical skills to see their ideas through to realisation.
- Provide an education in disciplines relevant to the development of the built environment aiming to cultivate interaction and teamwork culture amongst various professionals in the field.

Distinctive Features of the Programme

This programme prepares students for a career in civil and construction engineering. The programme embraces recent industry developments, in particular the introduction of the Engineering Council, UK (ECUK) Standard for Professional Engineering Competence (UK-SPEC), and gives students the opportunity to achieve the relevant and appropriate professional status. The curriculum emphasizes the development of traditional engineering numerical strengths coupled with an enquiring creative approach as required by employers. This degree will give students a solid foundation for entering the industry equipped with the necessary skills required to excel in a competitive environment.

Year 1 (Level 3): Total Credit Hours = 42	
Semester 1	Semester 2
1. Mathematics 1	6. Engineering Science 2
2. Intermediate English	7.Computer Programming for Engineering
3. Principles of Engineering	8. Mathematics 2
4. Engineering Science 1	9. Constructing the Built Environment
5. Study Skills and Professional Practice	10. Laboratory and Workshop Skills
	11. Advanced English
Summer Semester (Compulsory)	
12. Civilisation and Bahrain History	
13. Human Rights	
14. Arabic Language or English Language for non-Arabic speaking students	
Year 2 (Level 4): Total Credit Hours = 36	
Semester 1	Semester 2
1. Engineering Practice and Design 1	7. Engineering Practice and Design 2
2. Engineering Mathematics 1	8. Engineering Mathematics 2
3. Surveying and Structures 1	9. Surveying and Structures 2
4. Principles of Engineering Science 1	10. Principles of Engineering Science 2
5. Structural Design	11. Engineering Ethics
6. Environmental Engineering	12. Soil Mechanics
Year 3 (Level 5): Total Credit Hours = 36	
Semester 1	Semester 2
1. Design and Construction 1	7. Design and Construction 2
2. Civil Engineering Drawing and Surveying	8. Theory of Structures
3. Advanced Engineering Mathematics	9. Civil Engineering and Construction Field Study
4. Hydraulics	10. Engineering Management and Economics
5. Structural Mechanics	11. Advanced Structural Analysis and Design
6. Infrastructure and Highway Engineering	12. Internship
Year 4 (Level 6): Total Credit Hours = 36	
Semester 1	Semester 2
1. Structural Design and Analysis 1	7. Current Topic in Civil and Construction Engineering 2
2. Civil Engineering Material	8. Geotechnical Engineering
3. Foundations	9. Structural Design and Analysis 2
4. Engineering System Design	10. Construction Management
5. Engineering Research Methods	11. Project (6 Credit Hours)
6. Innovation, Enterprise and Management	

Tuition Fees

Total required credit hours per programme: 150 Credit Hours
Fees per Credit Hour: BD 180
Additional Cost: BD 120 (Registration and Admission fees)

Applied Science University

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