

MOBILE AND NETWORK ENGINEERING

Degree Level: Undergraduate



Qualification type	Location	Study mode	Delivery Language	Duration
Bachelor's Degree	Main Campus	Full Time	English	Four Years

KEY FACTS

SDG



Study Abroad

Yes

Internship

Yes

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OVERVIEW

The Bachelor's Degree programme in Mobile and Network Engineering (BSMNE) is a broad-based programme that provides the student with the technical knowledge and skills required to plan, design, construct and maintain telecommunications networks, equipment and facilities. This programme emphasizes an in-depth understanding of the technologies that support the local and global broadband digital networking, and mobile communication systems that are required for tomorrow's broadband-interactive information transmission.

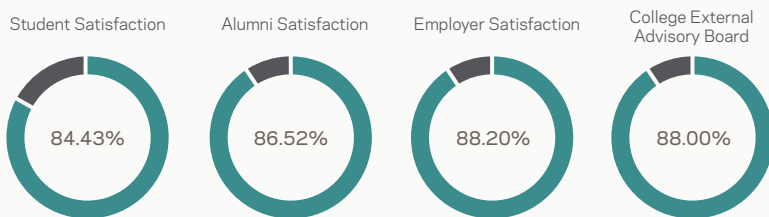
Through this programme, students acquire an in-depth knowledge in wireless and mobile communications, Computer networks, network design, Network switching and routing, mobile device programming, modern digital and analogue communication systems, and multimedia service convergences ensuring that graduates are fully prepared for employment within the sector. The several network courses embedded within the curriculum prepare students for professional certification such as Cisco CCNA and CCNP.

PROGRAMME AIMS

The aim of the programme is to enable graduates to:

- To equip learners with in-depth knowledge and skills necessary to exhibit sustainable competence in the fields of mobile and network engineering in accordance with national and international standards.
- To enable learners to identify and solve multifaceted problems in their area of specialization with a view to designing, analyzing, implementing and managing efficient solutions germane to current Engineering technologies.
- To empower learners to successfully pursue careers as mobile and network engineers motivated to engage in research and life-long learning in ways that serve the societal needs.
- To instill in learners, who contribute productively to society through responsible professional engineering practice, norms of ethical behavior.

GENERAL STATISTICS



ENTRY REQUIREMENTS

Admission to Ahlia University (AU) is selective based on academic achievements. Applications are welcomed from all students regardless of race, colour, gender, religion, nationality, physical or learning disability. Admission is purely based on merit.

General Requirements

To be eligible for consideration for admission to the undergraduate programmes, applicants must meet the following entry requirements set by the university in-line with Bahrain Higher Education Council requirements:

- The applicant must hold a recognised and endorsed secondary school certificate or its equivalent
- The applicant must be medically fit for the academic programme they wish to enrol in

Specific Requirements

The applicants who meet the following programme specific admission requirements will be admitted to the programme:

Bachelor's Degree in Mobile and Network Engineering	Academic Score in the Secondary School Certificate (Tawjihia) or its Equivalent	
	Unconditional Acceptance	Tracks Accepted
	≥ 70%	Science, Technical & General

Candidates who do not meet the above criteria in terms of academic score and specialization may be conditionally accepted subject to passing an interview and evaluation at the college level.

Orientation Programme

The Orientation Programme is a one-semester programme offered to full-time students who do not fully meet some of the admissions criteria (eg. english proficiency) but intend to pursue their education at Ahlia University.

Placement Tests

The university administers placement tests in English language and Mathematics. Students who pass these exams are exempted from the orientation programme.

FEES

Structured around 134 credit-hours covering 45 courses. The duration of study for each course is fifteen weeks, covering approximately 45 lecture hours.

Application Fee	BD 20
Registration Fee	BD 200
HEC ID fees	BD 30
100 Level Courses - 12 courses (BD 300 Per Course)	BD 3,600
200 Level Courses- 11 courses (BD 330 Per Course)	BD 3,630
300 Level Courses - 11 courses (BD 360 Per Course)	BD 3,960
400 Level Courses- 11 courses (BD 390 Per Course)	BD 4,290
TOTAL	BD 15,730
Additional fee chargeable	
Placement Tests Fee (if applicable)	BD 40
Orientation Courses (if applicable)	BD 1,200

STUDY PLAN

First Year

Year one consists of the general (University and College) required courses and include the following courses: Arabic, Academic English I, Introduction to Computers & IT, Calculus I, General Physics I, Academic, English II, Modern History of Bahrain, Introduction to Computer Programmemeing, Calculus II, General Physics II, Introduction to Statistics, Principles of Human Rights

Second Year

Year two consists of the remaining college required courses and includes the following courses: Electric Circuits, Discrete Structures, Differential Equations, Object-oriented Programming I, Signals & System, Digital Logic.

Third Year

Year three focuses on the courses required for the major and consists of the following courses: Computer Architecture & Organization, Communication Systems I, Mobile Application Development, Computer Networks, Antenna & wave propagation, Network Routing & Switching, Ethics & Professional Practice in IT & Engineering, Humanities/ Social Sciences.

Fourth Year

Year four focuses on the remaining major courses and consists of the following courses: Network Design & Security, Digital Signal Processing, Research Methods in Information Technology & Engineering, Multimedia Communications, Wireless Communication, Work-place Internship, Major Electives, Final Project.

Major Electives

Students can take any four courses (12 credit-hours) from the major electives (programme elective, as Cyber Security, WAN Technology, Optical Communication, Cloud Services Development and The Internet of Things).