BSc. (Honours)
Artificial Intelligence
Student Handbook

AOU / OU-UK

(Revised August 2021)

Arab Open University

Faculty of Computer Studies

B.Sc. Degree Programme in

Artificial Intelligence

Artificial Intelligence

Student Handbook

August, 2021

*The BSc Programme in **Artificial Intelligence** [BSc (Hons) AI] has been developed and is delivered by the Arab Open University (AOU). It has been validated through a process of external peer review by the Open University (OU), UK.*

Note

Please note that information in this handbook is subject to change and continuous updating. Please check for updates at our website:

http://www.arabou.edu.kw

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Welcome and Introduction

Welcome

We, at the Faculty of Computer Studies (FCS) at Arab Open University (AOU), are delighted to welcome you to study on our BSc (Hons) Artificial Intelligence Degree Programme. The AOU is a premier institution of higher education in MENA region and it is currently operating in 9 Arab countries including Kuwait, KSA, Oman, Bahrain, Jordan, Lebanon, Egypt, Sudan and Palestine with AOU headquarters in Kuwait. Students refer to their local country branch administrations for academic and administrative matters related to their local countries.

The AOU uses a Blended Mode of education consisting of at least 25% face to face tutorials and the remaining studies based on Independent Learning. The FCS is one of the major faculties of AOU in operation for the past about 18 years. The FCS offers majority of its programmes of study, including the BSc (Hons) Artificial Intelligence programme in partnership with the Open University (OU), UK. This partnership enables the FCS to offer quality programmes to its students which are well recognized locally as well as internationally. The graduates of this programme are entitled to receive a dual degree at the completion of their studies

The field of Artificial Intelligence is in great demand and you have made a wise decision to study this major. The current significance and importance of the Artificial Intelligence field is a direct result of the industrial revolution, internet, Machine Learning and robotics in recent years. The result of this is the need of Artificial Intelligence scientists with relevant skills.

The graduates of the Artificial Intelligence programme are expected to find jobs and build useful careers in wide variety of sectors in the industry such as Big Data, Cloud Computing, Machine Learning and Embedded Machine Learning, Security Analysis, Robotics, etc. Along with building careers in the industry, we will encourage all our graduates to support their local communities by utilizing their skills and expertise to solve problems of the communities or enhancing existing solutions.

Throughout your studies and stay at FCS, it will be emphasized to you to always use ethical practices in life, education and subsequently in your careers. Adoption of ethical practices will aid in the development of respectable and noble personality traits that will be invaluable and priceless to you throughout your life.

At the end we encourage you to put in your best effort and study hard to develop yourself to the best of your potential. We wish you a very fruitful and productive study period at FCS.

Good luck.

Prof. Omar Al Jarrah
Dean, Faculty of Computer Studies
Arab Open University

1. Introduction

Arab Open University is a university running in the MENA area including Kuwait, Saudi Arabia (KSA), Oman, Bahrain, Jordan, Lebanon, Egypt, Palestine and Sudan with its central Headquarters in Kuwait. The FCS Deanship at the Headquarters provides academic leadership to all 9 branches thus enabling them to act as one university in a unified manner. As an Open Education Institution, AOU adopts the Blended Mode of education, consisting of 25% face-to-face teaching and the remaining consists of independent learning on part of the students. By virtue of operating in 9 branches, offering a number of academic programmes and different requirements of the local accreditation bodies, the AOU's academic organization represents great deal of challenges and complexities.

The Faculty of Computer Studies (FCS) at AOU offers B.Sc. - Undergraduate Programme in Artificial Intelligence (AI) with a core of 360 Points (96 Credit Hours). This programme is offered by AOU to meet the needs of the modern society and the labour market.

Partnership with OU, UK

Our graduates will be awarded two Honours degrees: one from the Open University, UK and the other one from AOU through one of our 9 local branches; Kuwait, Kingdom of Saudi Arabia, Bahrain, Egypt, Jordan, Lebanon, Oman, Palestine, and Sudan.

Enhancing the student experience is one of the main objectives of FCS. Therefore, the student will be equipped with practical and soft skills in addition to the ethical practices in order to be ready for the real world as well as the labour market.

Why Artificial Intelligence?

According to the World Economic Forum Report entitled "The Future of Jobs Report" which is published in October 2020 (refer to http://www3.weforum.org/docs/WEF_Future_of_Jobs_2020.pdf), Artificial Intelligence is expected to have a great role in the industrial revolution. For instance, automated reasoning, robotics, knowledge representation,

perception, Natural Language Processing (NLP), economic benefits of Machine Learning.

Our Artificial Intelligence Programme provides a strong theoretical infrastructure, along with deep technical focus to ensure that graduates have the right combination of theoretical background and technical ability. This unique combination of theoretical knowledge and technical capabilities are equipped to enjoy significant rewards in the world's most challenging industry. Our Deanship and the corresponding departments in AOU operating country campuses have an excellent network of contacts within industry to ensure smooth transition from university into labour market.

Studying AI will enable the students to face the future and find jobs in the challenging labour market. In addition, AI programme offered by AOU-FCS has an edge over the programmes offered by others in providing students with skills to succeed both in the traditional professions as well as in their AI based business/entrepreneurship.

The Artificial Intelligence programme provides its graduates with the top and the most in-demand skills around the globe, AI Programme aims to:

- Prepare students for a professionally proven career able to meet industry demand for high calibre graduates in the domain of Computing and Artificial Intelligence as well as their related fields.

- Provide students with necessary knowledge in Mathematics and Computing to enable their depth and breadth study in the Artificial Intelligence fields.

- Develop students' theoretical and practical skills over a broad range of Artificial Intelligence key areas together with a knowledge of currently available tools and technologies.

- Build the students' practical and analytical skills required for software development, such as analysis, design, implementation, evaluation and maintenance.

- Develop students' legal background and ethical standards to become a responsible and socially aware information technology professional.

- Nurture student's confidence and transferable skills in communication, self-learning, scientific research, problem-solving, critical thinking, as well as being efficiently able to work in a team and as an individual.

2. Academic Calendar

The FCS follows the general academic calendar of the AOU, which consists of two main academic semesters (Fall and Spring), each consists of 16 weeks, and additional (optional) summer semester of 10 weeks. The student can successfully complete his/her study within a period of average 4 year. However, this duration can be shortened to 3.5 years if the student register in the Summer semesters. It is important to note that for the main semesters (i.e., Fall and Spring), min (8) /max (21) credit hours should be registered by the student, and hence the overall study period may be expanded or compressed according to the student capability. With respect to the optional Summer semester, the student can only register up to 12 credit hours. It also worth to mention that all the modules are continuously available in each semester. The Fall Academic Semester usually starts in October and ends in February whereas the Spring Academic Semester runs from March till July. The Summer Semester usually runs from July till September. The assessment dates are clearly listed in the Academic Calendar. Each module calendar is based on the Academic Calendar of the AOU. A representative Academic Calendar is given in link: https://www.arabou.edu.kw/students/pages/academic-calendar.aspx

3. Teaching and Learning Methodology

Knowledge and understanding are acquired from specially prepared teaching texts for majority of modules, supported by self-assessment and in-text questions, reference texts, multi-media packages, directed reading, computer mediated conferencing, web-based resources, and video and audio recordings. Students work independently with the teaching materials but they are encouraged to form self-help groups with other students, communicating face-

to-face, by telephone, email and computer conferencing and through the Learning Management System (LMS). All modules are delivered based on a blended learning model, which consist of 25% face-to-face and 75% is self-learning. The 25% face-to-face consist of 2 hours per week for 8 CHs module, and 2 hours biweekly for the 4 and 3 CHs modules or based on local regulations of MoHE, in addition to one office hour per 2 taught hours. On the other hand, the 75% self-learning depends on the students' self-study based on the teaching materials uploaded on the Central-LMS. Such materials are mainly PowerPoint slides, lectures note, activities, and other e-resources. Details about Learning and Teaching Strategy at AOU is available in the following link https://www.arabou.edu.kw/blended-learning/Pages/about.aspx

4. List of Programme Director and Academic Staff, Their Contact Details and Availability Arrangements

The programme team leader for the B.Sc. in Artificial Intelligence is Dr. Ahmed Gawish, the General Programme Coordinator (GPC), under the supervision of the Dean of FCS, Prof. Omar Al-Jarrah (dean.it@arabou.edu.kw). The lists of programme director at the AOU Headquarters and academic staff at the branches are available electronically on the AOU's website at https://www.arabou.edu.kw/Pages/default.aspx**.** The academic staff at the FCS is available to you during the 25% face-to-face tutorial sessions and also during the office hours.

5. List of Support Staff (Technical and Administrative)

Support staff at the Headquarters and at the branches are ready to support you in your studies. Their contact details are available at branch websites https://www.arabou.edu.kw/Pages/default.aspx

6. Details of External Examiners

AOU assessment strategy is based on general principles and procedures aiming to organize and monitor the examinations at all AOU branches. AOU regulations include validation (pre-assessment moderation) of examination

questions and answer keys by external examiners (EE), audit tutors' marking, post-assessment moderation; and 4 tiers of examination committees.

Table 6.1 provides a brief about the external examiners (EEs) at the Faculty of Computer Studies (FCS).

Table 6.1 Summary of External Examiners

Name	Position	Institution
Prof. Alistair Duffy (Chief External Examiner)	Professor of Electromagnetics, Faculty Head of Research and Innovation	De Montfort University, The Gateway, Leicester.
Prof. Ahmed Al-Dubai (External Examiner)	Professor in the School of Computing	Edinburgh Napier University, UK
Dr. Rahat Iqbal (External Examiner)	Senior academic-Associate Professor	Coventry University, UK
Dr. Tariq Abdullah (External Examiner)	Academic lead Computing and IT and research fellow	University of Derby, UK
Dr. Salem Al-Jareh (External Examiner)	Senior Lecturer	University of Portsmouth, UK

7. Introduction to the programme

The Faculty of Computer Studies (FCS) starts offering Artificial Intelligence in September 2021. Artificial Intelligence is one of the trend programmes in high rank international universities and strongly, a required major in labour market. FCS Deanship has collaborated with a local research team to conduct extensive surveys aiming to satisfying the requirements of local authorities, ministries and commissions along with the working alumni across AOU Country Campuses in addition to the market/industry needs. These researches have led to design and offer the programme of Artificial Intelligence.

Philosophy

The deanship philosophy of running the Artificial Intelligence during the academic life is to keep it up-to-date with the latest technical advancements, and satisfy the relevant market/employer needs. In addition, the AOU in general is keen to keep its programmes revalidated by the OU, UK to provide our students with extra international recognition to maximize their employment opportunities.

7.1 Artificial Intelligence Programme

The aim of the programme is to provide the student with a rigorous foundation of Artificial Intelligence, tools and applications that an Artificial Intelligence expert needs. Further, it prepares students for a variety of in-demand information technology careers, dedicated to professional working in software. The aim of the AI Programme is to equip the student with the knowledge and skills s/he will need to take part in software related industry

7.2 Graphical Presentation of the Programme

The following Table 7.1 shows the Programme Structure of Artificial Intelligence.

Table 7.1 Programme Structure of Artificial Intelligence

Level	Artificial Intelligence Programme Structure					
Level 0	University Requirements (Student may select from variety of modules)					
Level 1 (AOU) = Level 4 (OU)	Faculty Requirements					
	MST129 Applied Calculus (4 CHs)					
	Specialization/Core Requirements					
	MT131 Discrete Mathematics (4 CHs)	MT132 Linear Algebra (4 CHs)	MT141 Introduction to Probability and Statistics (4 CHs)	TM103 Computer Architecture and Organization (4 CHs)	M110 Python Programming (8 CHs)	TM112 Introduction to Computing and Information Technology (8 CHs)
	Faculty Elective					
	MS102 Physics (3 CHs)		M109 .NET Programming (3 CHs)			MT101 General Mathematics (3 CHs)
Level 2 (AOU) =	Faculty Requirements					
	TM260 Ethics, Law and the Governance in IT (4 CHs)					

Level 5 (OU)	Specialization/Core Requirements				
	M269 Algorithm, Data structure and Computability (8 CHs)	TM270 Artificial Intelligence (8 CHs)	TM271 Machine Learning and Deep Learning (8 CHs)	TM276 Software Development Processes and Methodologies (4 CHs)	TM275 Parallel and Distributed Systems (4 CHs)
	Faculty Elective				
	TM280 Smart IoT systems (3 CHs)				
Level 3 (AOU) = Level 6 (OU)	Specialization/Core Requirements				
	TM351 Data Management and Analysis (8 CHs)	TM340 Natural Language Processing (8 CHs)		TM341 Computer Vision (8 CHs)	TM471 Graduation Project (8 CHs)
	Faculty Elective				
	TM380 Autonomous Robotic Systems (3 CHs)				

Attendance Requirements

The FCS follows the hybrid model of open education (Blended Learning) at AOU which requires 25% face-to-face tutorial attendance in a classroom environment. The 25% face-to-face tutorial sessions are mandatory and if student fails to attend 3 consecutive tutorial sessions without due, causes student to be suspended from the module and student needs to retake the module. The 25% face-to-face tutorial sessions are clearly marked in individual module calendar using the guidelines illustrated in table 7.2.

Table 7.2 Attendance Requirements

Number of Credit Hours	Points	No. Hours/Tutorial Sessions
3	10	1 hour tutorial every week
4	15	1 hour tutorial every week
8	30	2 hours tutorial every week
16	60	4 hours tutorial every week

Opportunities available to students on completion of the programme (Employment, further academic study, etc.)

On successful completion of the B.Sc. degree, graduate student will be able to get employment opportunities in both the Middle Eastern (ME) markets and the international markets since this B.Sc. programme would be validated by the

OUVP. This degree opens up the world of technology and an array of exciting careers in a wide range of sectors for student.

The B.Sc. degree helps graduate student to become a dominant player in the field of Artificial Intelligence; to analyse, develop, test, maintain, integrate and use systems; to participate in innovating new solutions to meet specific market or organization needs. Some of the key areas where graduate students can find employment opportunities include the following:

- Applications Developer
- AI Data Analyst/Engineer
- Applied Machine Learning Engineer
- Big Data Engineer/Architect
- Business Intelligence Developer
- Cloud Computing Engineer
- Computational Linguist
- Computer vision engineer
- Security Analyst Engineer

- Designer in Human-Cantered Machine Learning
- Embedded Machine Learning Engineer
- Machine Learning Operations (MLOps) Developer
- Machine Learning Researcher
- Data Scientist
- Research Scientist
- Robotics Scientist

8. Programme Specification

The 96 Credit Hours core modules are placed in section-3 for validation. Students seeking a BSc (Hons) degree in Artificial Intelligence (AI) at AOU must complete at least 131 credit hours including the 96 CH core modules and 35 AOU requirements.

1. Overall AI Programme Requirements (AOU) (Table- 8.1)
2. General University requirements (Table- 8.2)
3. Faculty compulsory Requirements (Table- 8.3)
4. Faculty elective requirements (Table- 8.4)
5. Faculty core requirements (Table- 8.5)
6. Details of Specialization/Core Requirements (Table- 8.6).

Programme Requirements (131 CHs)

Table 8.1: Programme Requirements

Requirement type	Credit Hours
University Requirements/ Mandatory	18
University Requirements/ Electives	3
Faculty Requirements/ Mandatory	8
Faculty Requirements/ Electives	6
Specialization Requirements/ Mandatory	96
Total Credit Hours	131

The details of the previous requirements will be described as follows:

University Requirements/ Mandatory (60 points) (18 Credit Hours)

Table 8.2: Details of University Requirements (Mandatory)

Module	Module Title	Credit	Pre-requisites
AR113	Arabic Communication Skills	3	--
GB102	Principles of Entrepreneurship for	3	--
GR118	Life Skills and Coexistence	3	--
GT101	Learning and Information	3	--
EL111	English Communication Skills I	3	EL099
EL112	English Communication Skills II	3	EL111
Total		18	

* The list of modules and/or the modules contents may be updated/replaced as per AOU university council decision or local accreditation requirements

University Requirements/ Electives (10 points) (3 Credit Hours)

Table 8.3: Details of University Requirements (Electives)

Module Code	Module Title	Credit Hours	Pre-requisites
GR111	Arabic Islamic Civilization	3	--
GR112	Issues and Problems of Development in the	3	--
GR115	Current International Issues and Problems	3	--
GR116	Youth Empowerment	3	--
GR117	Women Empowerment	3	--
GR121	Environment and Health	3	--
GR131	General Branch Requirement	3	--
CH101	Chinese for Beginners (I)	3	--
CH102	Chinese for Beginners (II)	3	CH101
SL101	Spanish for Beginners (I)	3	--
SL102	Spanish for Beginners (II)	3	SL101
FR101	French for Beginners (I)	3	--
FR102	French for Beginners (II)	3	FR101

The list of modules and/or the modules contents may be updated/replaced as per AOU university council decision or local accreditation requirements

Faculty Requirements / Mandatory (30 points) (8 Credit Hours)

Table 8.4: Details of Faculty Requirements (Mandatory)

Module code	Module title	Credit Hours	Points	Source	Pre-requisites
MST129	Applied Calculus	4	15	AOU	EL099
TM260	Ethics, Law and the Governance in IT	4	15	AOU	TM271+

+ *the pre-requisite can be registered in parallel*
* *The TM260 may be replaced by an applied module as per the local accreditation requirement.*

Faculty Requirements / Elective (20 points) (6 Credit Hours)

Table 8.5: Details of Faculty Requirements (Electives)

Module code	Module title	Credit Hours	Points	Source	Pre-requisites
MS102	Physics	3	10	AOU	EL111
M109	.NET Programming	3	10	AOU	EL111
MT101	General Mathematics	3	10	AOU	None
TM280	Smart IoT Systems	3	10	AOU	TM112
TM380	Autonomous Robotic System	3	10	AOU	TM271

Note- The student will not be allowed to take more than one elective module per level from the above Table-8.5.

Specialisation/ Core Requirements (96 Credit Hours)

The students are expected to finish each level before moving on to the next level. The details of core modules are given as follows:

Table 8.6: Details of Specialization/Core Requirements

Level	Code	Module Title	Source	Points	Credit Hours	Pre-requisites
Level 1 (AOU) = Level 4 (OU)	MT141	Introduction to Probability and Statistics	AOU	15	4 CHs	EL111
	TM103	Computer Architecture and Organization	AOU	15	4 CHs	EL111
	MT131	Discrete Mathematics	AOU	15	4 CHs	EL111
	MT132	Linear Algebra	AOU	15	4 CHs	EL111
	M110	Python Programming	AOU	30	8 CHs	EL111
	TM112	Introduction to Computing and Information Technology	OU	30	8 CHs	M110
Level 2 (AOU)	M269	Algorithm, Data structure and Computability	OU	30	8 CHs	M110

	TM270	Artificial intelligence	AOU	30	8 CHs	TM112 & MT141
= Level 5 (OU)	TM271	Machine Learning and Deep learning	AOU	30	8 CHs	MT141 & TM270
	TM275	Parallel and Distributed Systems	AOU	15	4 CHs	TM103
	TM276	Software Development Processes and Methodologies	AOU	15	4 CHs	TM112
Level 3 (AOU) = Level 6 (OU)	TM351	Data Management and Analysis	OU	30	8 CHs	M269
	TM340	Natural Language Processing	AOU	30	8 CHs	TM271
	TM341	Computer Vision	AOU	30	8 CHs	TM271
	TM471	Graduation Project	AOU	30	8 CHs	TM351 or TM340 or TM341

Artificial Intelligence Programme - Recommended Study Plan

The academic year at AOU consists of two main academic semesters (Fall and Spring), each consists of 16 weeks, and additional (optional) summer semester of 10 weeks. The following structure plan is a suggested plan based on Fall and Spring semesters.

First Year				
Semester	**Modules**	**Title**	**Credit Hours**	**Pre-requisite**
1ˢᵗ (13 CHs)	EL111	English Communication Skills I	3	EL099
	GR118	Life Skills and Coexistence	3	-
	GT101	Computing Essentials	3	-
	MST129	Applied Calculus	4	EL099
2ⁿᵈ (14 CHs)	AR113	Arabic Communication Skills	3	-
	EL112	English Communication Skills II	3	EL111
	MT131	Discrete Mathematics	4	EL111
	MT132	Linear Algebra	4	EL111
Second Year				
Semester	**Modules**	**Title**	**Credit Hours**	**Prerequisite**
1ˢᵗ (14 CHs)	GB102	Principles of Entrepreneurship for Non-Specialists	3	-
	M110	Python Programming	8	EL111
	MT141	Introduction to Probability and Statistics	4	EL111
		A module from University Requirement/Elective	3	-
2ⁿᵈ (15 CHs)	TM112	Introduction to Computing and Information Technology	8	M110
	TM103	Computer Architecture and Organization	4	EL111
		Faculty Elective	3	
Third Year				
Semester	**Modules**	**Title**	**Credit Hours**	**Prerequisite**
1ˢᵗ (16 CHs)	M269	Algorithm, Data structure and Computability	8	M110

Semester	Modules	Title	Credit Hours	Prerequisite
	TM270	Artificial intelligence	8	TM112 & MT141
2nd (20 CHs)	TM271	Machine Learning and Deep learning	8	MT141 & TM270
	TM275	Parallel and Distributed Systems	4	TM103
	TM276	Software Development Processes and Methodologies	4	TM112
	TM260	Ethics, Law and the Governance in IT	4	TM271
Fourth Year				
Semester	**Modules**	**Title**	**Credit Hours**	**Prerequisite**
1st (20 CHs)	TM351	Data Management and Analysis	8	M269
	TM340	Natural Language Processing	8	TM271
	TM471A	Graduation Project - A	4	TM351 or TM340 or TM341
2nd (15 CHs)	TM341	Computer Vision	8	TM271
	TM471B	Graduation Project - B	4	TM471A
		Faculty Elective	3	

For details refer to AOU Website at

https://www.arabou.edu.kw/faculties/computer/Pages/undergraduate-programs.aspx

Types of the Programme's Certificate

AOU offers basically, two types of B.Sc. certificates as classified bellow:

1. BSc (Hons) Artificial Intelligence (360 points) validated by the local authorities of Ministries of higher educations in the AOU branches

2. Three different types of certificates validated by the Open University, UK, based on the completed credits as below (see figure 8.1):

   - BSc (Hons) Artificial Intelligence (360 points)

   - DipHE IT & Computing (Artificial Intelligence) (240 points: 120 credits from Level 1/4 and 120 credits from Level 2/5)

   - CertHE IT & Computing (Artificial Intelligence) (120 points from level 1/4)
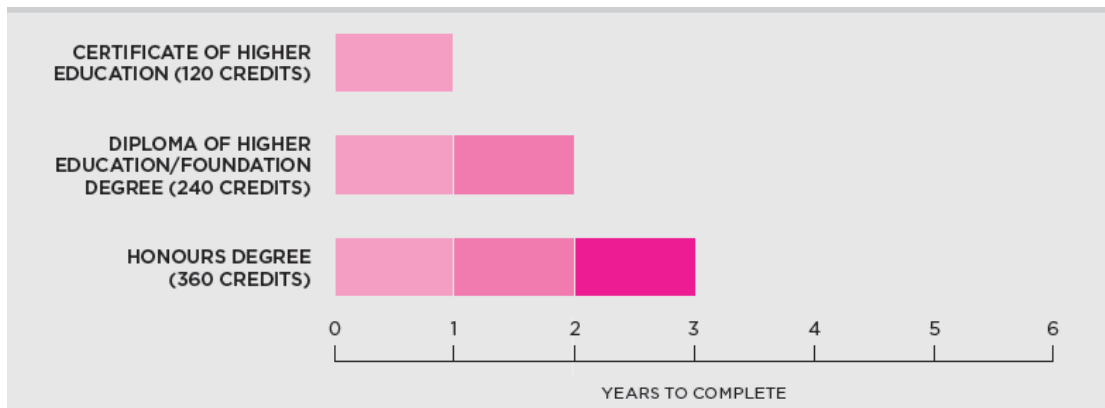
Figure 8.1. Types of Certificates Offered by Open University, UK.

please note that the Certificate and Diploma awards are exit awards only

9. Module Specifications

For more details, please refer to section 8 and the following AOU Website

https://www.arabou.edu.kw/faculties/computer/Pages/course-catalogue.aspx

9.1   The minimum technical specifications requirements

The minimum specifications of laptop/PC and any software requirements for students enrolling on the AI programme are listed as follows:

- ➢ CPU: Core i5.
- ➢ RAM: 16 GB.
- ➢ Storage: 1 TB
- ➢ Broadband Internet connectivity

10. Student Support, Guidance and Advice

Good experienced tutors are available across AOU campuses to provide proper academic advice and guidance to students. Each student is assigned to a specific academic advisor to get the necessary academic advising and support. In general, there is an Academic Advising Unit at each branch to help all the students in their academic life and personal issues as well as providing advice regarding jobs and future career. The contact information of those staff members is available at the local country campuses. The following table 10.1 gives an overview about the available services and support to Artificial Intelligence students across various AOU campuses. students are encouraged to identify with guidance, to reflect on their own learning needs and are offered the following support as appropriate to those needs:

Table 10.1 Details of Student support, guidance and advice

Service	Detail
Student induction day	Student induction day that focuses on the requirements for the B.Sc.'s modules and graduation project.
Student handbook	AOU student handbook containing the main information related to the university, and the various programmes of study.
LMS	A virtual learning environment to support students remotely via teaching/learning material, supplementary material, frequently asked questions and collaborative tools and technologies.
Support/Teaching/Management Staff	Access to support, teaching and management staff.
Online Resources	Access to AOU resources e.g. physical library/digital library, eLearning materials – outside normal class times.
Appeals and Complaints System	Online access to student services through the Student Support System (SSS) at https://sisonline.arabou.edu.kw/
Disability and Dyslexia Support Services (DDSS)	AOU provides all students the necessary services to enable them to fulfil the intended learning outcomes of their study in a friendly educational and social environment. Students with disabilities and learning difficulties are paid special attention. The services provided to our students are dealt with confidentially and are not disclosed to a third part without the student's written consent. This DDSS online system provides the students with all information about the services and facilities made available to them by AOU and is accessible at https://sisonline.arabou.edu.kw/
Financial aids	Financial aid and advice are provided to our students
Learning support	Access to a large collection of reading material, simulations, Java applets, video clips, e-library, LMS and secrets of student success to enhance your study skills is made available to our students at https://arabou.edu.kw/.
Career Advice	A collection of video clips on choosing a career, writing a professional CV and preparation for interview is accessible at: Find job How to prepare your CV Most in demand skills in 2021: Most in demand skills - 2021 Skills that can get you hired in 2021: Skills that can get you hired

11. Opportunities for personal development planning

By virtue of being an Open Education institution, the AOU encourages students to prepare Personal Development Planning (PDP) for themselves. The PDP provides opportunity to students to plan their studies according to the goals and objectives that they want to achieve from their studies. It enables them to track their achievements and goals in a systematic manner. It provides a platform to them to reflect on their studies and measure their progress towards intended objectives that they want to achieve. The PDP is a valuable tool in Open Education since it supports the process of developing Independent Learning which is the key for success in open learning environment.

12. Opportunities and support for study abroad

The current B.Sc. programme requires the completion of all modules of the academic calendar at the FCS - AOU. In case student wishes to transfer to another institution, student would be required to inquire about the transfer of credits provisions at that institution.

13. Work placement information

There is no work placement requirement in the current study plan of the B.Sc. programme. The main practical work involved is the individual practical work required during the preparation of the Tutor Marked Assignment (TMA), one of the assessment components per module, in addition to the practical work required for the Final Graduation Project (TM471).

14. Facilities and Services

All branches enjoy adequate resources, especially in light of:
- Operating in new building for most branches, including Kuwait, Egypt, Jordan, Bahrain, KSA, Lebanon.
- Meeting the standards of the domestic accreditation bodies and Ministries of Higher Education.
- Continuously updating and upgrading both the physical and electronic resources, including e-library, Learning Management System (LMS), Student Information System (SIS), etc. to support students. In addition,

- wide range of supplementary material and video recordings are offered through the LMS.
- Introducing the Smart Book to some modules by agreement with McGraw-Hill, the publisher, in order to support students and provide the highest technology available in e-learning.
- AOU provides enough computer labs for its students equipped with hardware and software resources to support the curriculum of the cloud programmes.
- Specialized labs are provided at AOU country campuses such as Cisco labs to support Networking modules. The new buildings offer seminar halls and dedicated spaces for libraries with at least one lab to access the e-library. It is interesting to point out that well-trained human resources are provided to help students, accessing either the physical or e-library. Regular workshops are held for students, especially new comers, to train them on how to use LMS and e-library, and to provide them with the fundamental background about good academic behaviour.
- The e-Library could be accessed at the AOU's website through the following link: http://www.aou-elibrary.com/
- Appeals and Complaints system is inside Student Information System (SIS) on the AOU website. The URL is: https://sisonline.arabou.edu.kw/
- Central LMS that can be navigated once student logs in to local LMS via link https://mdl.arabou.edu.kw/

15. Assessment and progression regulations

AOU assessment strategy is based on general principles and procedures aiming to organize and monitor the examinations at all AOU branches. AOU regulations include validation (pre-assessment moderation) of examination questions and answer keys by external examiners (EE), audit tutors' marking, post-assessment moderation; and 4 tiers of examination committees which are:
- Branch Examination Committee (BEC)
- Module Assessment Committee (CAC)
- Faculty Examination Committee (FEC)
- Central Examination Committee (CEC)

15.1 Main Principles of Assessment at AOU

AOU has explicit procedures for ensuring that student performance is properly judged and for evaluating how academic standards are maintained through assessment practice. The following are some of the procedures which FCS:

- All types of assessment aim to test the Learning Outcomes (LOs) matched with the module.
- The creation and administration of all types of assessment is a team work.
- All assessment components are reviewed and approved by EEs.
- Strict quality measures take place to guarantee fair/correct marking at all branches and across them through Cross branch marking (CBM)
- Sample of students' marked work/scripts from all the modules per branch as well as the CBM are review by EEs which is done at the end of each academic semester.
- There are four tiers of Examination Board structure to approve the final students' results at the end of each semester.

15.2 Assessment Components

The assessments at AOU comprise of 3 components:

- Tutor Marked Assignment (TMA) weighs 20%

     Students are provided detailed feedback on their TMA work and this is an essential part of learning policy at AOU. Feedback, which is usually an Excel sheet, provides clear distribution of grades, tutor comments for each question and students' strengths, weaknesses, and steps for improvement. Feedback is provided to students on LMS and can be discussed with students during in class face-to-face, laboratory, and office hours.

- Mid-Term Assessment (MTA) weighs 30%
- Final Exam weighs 50%

For more details about the assessment, see section 17.

Graduation project (TM471) has different weights as follow:

- Preliminary presentation: 5 %
- Report Part-1: 25%
- Presentation (Final): 10%
- Report (Final): 35%
- Implementation (deliverable): 25%

For more details about the assessment of graduation project, <u>see section 16</u>

15.3 Grade Point Average (GPA) and Equivalent Letter Grades:

AOU follows the Grade Point Average (GPA) on a scale of 0 to 4 as shown in table 15.1.

Table 15.1 GPA and Equivalent Letter Grades at AOU

AOU		
Letter Grade	Range	Points
A	100 – 90	4.00
B+	89 – 82	3.50
B	81 – 74	3.00
C+	73 – 66	2.50
C	65 – 58	2.00
D	57 – 50	1.50
Fail	Below 50	0

On successful of student, his/her grade will be out of 4 as shown in table 15.2

Table 15.2 Cumulative Average Grade

Cumulative Average	Grade
3.67-4.00	Excellent
3.00-3.66	Very Good
2.33-2.99	Good
2.00-2.32	Pass

15.4 Marking of Assessments:

Marking, Double-marking, and Cross Branch Marking.

The FCS adopts transparent and fair mechanisms for marking which is done by tutors and approved by EE. The process goes through several steps:

- **Marking**: done by tutors within the branch and monitored by BCC.
- **Double-marking**: done by tutors within the branch and monitored by BCC

- **Cross Branch Marking (CBM)**: done by tutors from another branch to ensure uniformity of script marking

For more details, the assessment and progression regulations have been made available to students on the AOU's website at https://www.arabou.edu.kw/university/Pages/regulations.aspx . In addition, assessment guides will be provided to students with the module material packages.

16. Graduation projects

The module TM471 is the final component of the B.Sc. programme at FCS. Students undertake and complete the TM471 Project work on individual basis. Topics of the final year project are chosen by students themselves or suggested ideas by their supervisor. In both cases, deep discussions take place between the student and the supervisor in order to select the suitable project topic. Then the student has to submit project proposal that explain the main outline of the project. During the academic semesters, student should show up and presents his/her progress in order to receive proper advice, feedback, and support by supervisor.

The project consists of a written report of about 8,000 to 10,000 words. This report is a culmination of about two semesters of research work by student, individually, under the guidance of student's project supervisor. Student must also complete TMA, project implementation and give 2 oral presentations.
In order to undertake the TM471 Project, various software tools and packages would be required. It is the student's duty to consult his/her supervisor well in advance of project selection regarding the availability of both the software tools and the expertise available at FCS regarding the usage of the tools. Student should agree with his/her supervisor regarding the software tools that would be required for TM471 projects in advance to avoid any future problems.

17. Determination of results

For various modules, the assessment usually consists of 3 components; Tutor Marked Assignments (TMA), Midterm Assessment (MTA) and Final Examination. The weighting of the assessment components is as follow:

- TMA: 20 %
- MTA: 30 %
- Final Exam: 50 %

It is important to note that the AOU flexibly adopts a different assessment method to cope with any emergency. For example, during the pandemic of COVID19, AOU has adopted the following method:

- TMA: 20 %
- MTA: has been changed to 5 online quizzes that worth in total 30 %
- Final Exam: has been changed to be Take Home Exam that worth 50 %

To pass any module the following conditions should take place:

- Continuous assessment (TMA + MTA): at least 30%
- Final Exam: at least 40%
- In total at least 50% of the overall mark (TMA + MTA + Final).

The results are processed centrally at the Headquarters, and communicated to student by domestic branch authorities after being approved by the Central Examination Committee (CEC) at the Headquarters. The FCS at AOU follows a tiered approach to examination boards and committees. The key role of these assessment boards is to ensure fairness and standardization of the assessment processes.

17.1 How Results Are Communicated

Final module results are announced on the university website (https://arabou.edu.kw/), where students can check at their results by logging in to the Student_Information_System (SIS) with student's credentials. This link can be found under the student services menu. The following screens show the steps:

1. Login to the online Student Services with student number as a User ID and student's password and select the correct branch.

2. Once the student logs in, he/she can avail the benefits of the available services provided on the system.

3. The student will select the box titled Grades Box in the 2nd row in order to view his/her grades. By selecting Grades box, the grades details will appear on student' computer screen.

Note: Grades are not confirmed until they have been approved by External Examiners and ratified at Exam Boards.

18. Other Institutional Policies and Regulations

Some of the information below may be given in the form of general brief statements that refer student to a separate generic institutional policy document.

- Disability statement
- Grounds and procedures for appeals
- Equal opportunities statement
- Data protection
- Health and safety issues

The AOU strongly believes in providing ***equal opportunities*** to all students studying at the university. It also makes efforts to provide a safe, secure, healthy and confidential environment to students (https://www.arabou.edu.kw/university/Documents/Regulations/aou/en/Equal%20Opportunity%20and%20Respect%20for%20Diversity.pdf). students have the right to appeal to the branch authorities. Processes and procedures for your appeals / complaints and disability and dyslexia enquiries are contained in the rules and regulations of the AOU and are accessible to students through the University's website at (https://sisonline.arabou.edu.kw/).

1. Once student login to the online Student Services using the correct credential, the student select the Box titled "Student Support" in order to view his/her grades.

2. On selecting Student Support box, a screen consisting of Appeals and Complaints details will appear on student's computer screen.

19. Student Participation and Evaluation

Students are strongly encouraged to participate in and evaluate the academic activities at AOU. Student feedback is solicited through various surveys such as students' views on modules, tutors, and facilities etc. Also, some students are members of the Student Staff Liaison Committee (SSLC). Students' views are considered as a very important instrument which is continuously solicited and used in enhancing Students learning experience at AOU.

AOU has finalized the bylaws of its Alumni association and it is expected that Students feedback will contribute in enhancing all FCS programmes.

Student feedback is an essential element of the Quality Assurance (QA) process at AOU. The QA department solicits feedback from students through a variety of questionnaires and feedback forms, which are offered through the Learning Management System (LMS). The QA department has Branch QA Coordinators (BQACs) who are responsible for collecting student feedback at each Branch. The aforementioned feedback is subjected to detailed analysis by both the AOU_QA Department as well as the Deanship in order to be included and concluded in the Annual Programme Evaluation that is submitted to the OUVP.

The major areas on which student feedback is obtained include the following:

- Student evaluation of tutors
- Student evaluation of modules
- Student evaluation of branch resources and service

Student can also apply for appeals, which are dealt with through the online appeals and complaints system (part of the SIS-Student Information System). The Arab Open University's Alumni Association (AOUAA) is an association that aims at maintaining relations between AOU and its former students and between graduates and their fellows. AOUAA is a forum for forming relationships between people of common interest. AOUAA is organized into 9 chapters at KSA, Kuwait, Bahrain, Oman, Egypt, Jordan, Lebanon, Sudan and West Bank. AOU Alumni Association Bylaws could be found on the university's website. FCS encourages students to register in the AOUAA.

20. General Reading List

A general reading list (i.e. not module specific), including electronic resources) has been compiled by FCS staff. The list indicates some important books and journals. This list has been made available to students at the following link: https://www.arabou.edu.kw/faculties/computer/Pages/general-reading-list.aspx

Electronic resources are available on the LMS at the AOU's website (http://www.arabou.edu.kw/).

End of Student Handbook