

Details of Study Plan

BSc (Hons) Information Technology & Computing – 2021

1 Overall Programme Structure ¹

To receive award certificate of BSc (Honours) Information Technology & Computing (BSc. ITC) at AOU-Bahrain, students must complete at least 131 credit hours (Cr.) including the 96 Cr. core modules and 35 Cr. AOU requirements. This document includes the following details:

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The distribution of credit hours/points among courses is summarized as follows:

Table 1: Overall ITC Programme Requirements (AOU-Bahrain)

Requirement type	Cr.	OU Points
University Requirements/ Mandatory	15	-
University Requirements/Local Requirements	5	-
Mandatory University Courses	1	-
Faculty Requirements/Mandatory	8	-
Faculty Requirements/Electives	6	-
Specialization Requirements/Mandatory	96	360
Total Credit Hours	131	360

In addition, students shall be required to study Orientation courses if they do not satisfy the minimum requirements of being exempted from the course.

¹ The Study plan has been customized to include History and Civilization of the Kingdom of Bahrain (GR131), Human Rights (LAW107) and Industrial Training (INT300). In addition, one general course GR118 was removed from the local plans based on the communication between AOU-Bahrain and HQ.

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2 Details of Courses per Requirement²

2.1 Orientation Courses [0 Cr.]³

Table 2: Orientation Courses

Module Code	Module Title	Cr.	Pre-requisites
EL099	English Orientation Programme	0	--
MT099 ⁴	Foundation Mathematics	0	--
Total		0	N/A

2.2 University Requirements/ Mandatory [15 Cr.]⁵

Table 3: Details of University Requirements/ Mandatory

Module Code	Module Title	Cr.	Pre-requisites
AR113⁶	Arabic Communication Skills (III)	3	--
EL111	English Communication Skills (I)	3	EL099
EL112	English Communication Skills (II)	3	EL111
GB102⁷	Principles of Entrepreneurship for Non-Specialists	3	--
GT101	Learning and Information Technology	3	--
Total		15	N/A

2.3 University Requirements/Local Requirements [5 Cr.]⁸

Table 4: Details of University Requirements/Local Requirements

Module Code	Module Title	Cr.	Pre-requisites
GR131⁹	History and Civilization of the Kingdom of Bahrain	3	--
LAW107¹⁰	Human Rights	2	--
Total Required		5	N/A

² The list of modules and/or the modules contents under "2.2 University Requirements/ Mandatory" or "2.3 University Requirements/ Local Requirements" categories may be updated/replaced as per AOU university council decision or local accreditation requirements. Any new updates to the plan will be implemented only after receiving the approval from HEC – Kingdom of Bahrain

³ The orientation course is only required for students who do not satisfy the minimum requirements of being exempted from the course.

⁴ MT099 is added as a pre-requisite at AOU-Bahrain to enhance students' performance in subsequent course. The addition is applied at AOU-Bahrain only and is approved by AOU-HQ.

⁵ GR118 is removed from AOU-Bahrain plan based on HQ approval.


⁶ AFL113 is offered as equivalent to AR113 for non-Arabic Speakers.

⁷ GB102 is offered as equivalent to GB102E for non-Arabic Speakers

⁸ This category has been added to cater for the local requirement in AOU-Bahrain and it replaces (University Requirements/ Electives) from the programme specification of the programme.

⁹ GR131EL is offered as equivalent to GR131 for non-Arabic Speakers.

¹⁰ LAW107EL is offered as equivalent to LAW107 for non-Arabic Speakers.

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2.4 Mandatory University Courses [1 Cr.]

Table 5: Details of Mandatory University Courses

Module Code	Module Title	Cr.	Pre-requisites
INT300	Internship	1	Completed Courses ≥ 100 AND GPA ≥ 2.0
Total		1	N/A

2.5 Faculty Requirements/Mandatory [8 Cr.]

Table 6: Details of Faculty Requirements/Mandatory

Module code	Module title	Cr.	Source	Pre-requisites
MST129	Applied Calculus	4	AOU	EL099 & MT099 ¹¹ & EL111 ¹²
TM260	Ethics, Law and the Governance in IT	4	AOU	TM255
Total		8	N/A	N/A

2.6 Faculty Requirements/Electives [6 Cr.]

Table 7: Details of Faculty Requirements/Electives

Module code	Module title	Cr.	Source	Pre-requisites
M109	.NET Programming	3	AOU	EL111 & MT099 ¹³
M277	Competitive Programming	3	AOU	M251 & M269 ¹⁴
MS102	Physics	3	AOU	EL111 & MT099 ¹⁵
MT101	General Mathematics	3	AOU	EL099
MT390	Image Processing	3	AOU	MT132 & M251
TM297	Compression Methods for Multimedia	3	AOU	TM112 & MT131
Total Required		6	N/A	N/A

¹¹ Check footnote 4.

¹² MST129 can be registered in parallel with EL111.

¹³ Check footnote 4.

¹⁴ M269 can be registered in parallel with M277.

¹⁵ Check footnote 4.

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2.7 Specialisation Requirements/Mandatory [96 Cr. – 360 points]

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

Table 8: Details of Specialization Requirements/Mandatory

Level	Code	Module Title	Source	Points	Cr.	Pre-requisites
Level 1 (AOU) = Level 4 (OU)	MT131	Discrete Mathematics	AOU	15	4	EL111 & MT099 ¹⁶
	MT132	Linear Algebra	AOU	15	4	EL111 & MT099 ¹⁷
	TM103	Computer Organization and Architecture	AOU	15	4	EL111 & MT099 ¹⁸
	TM105	Introduction to Programming	AOU	15	4	EL111 & MT099 ¹⁹
	M110	Python Programming	AOU	30	8	EL111 & MT099 ²⁰
	TM112	Introduction to Computing and Information Technology	OU	30	8	M110
Level 2 (AOU) = Level 5 (OU)	M251	Object-Oriented Programming using Java	AOU	30	8	TM105
	M269	Algorithms, Data Structure and Computability	OU	30	8	M110 & MT131
	TM255	Communications and information Technologies	OU	30	8	TM112
	T215B	Communications and information Technologies-Part B	OU	30	8	TM255
Level 3 (AOU) = Level 6 (OU)	TM351	Data Management and Analysis	OU	30	8	M269 or M251
	TM354	Software Engineering	OU	30	8	M251
	TM355	Communications Technology	OU	30	8	T215B
	TM471	Graduation Project	AOU	30	8	TM355 or TM354 or TM351
Total				360	96	N/A

¹⁶ Check footnote 4.

¹⁷ Check footnote 4.

¹⁸ Check footnote 4.

¹⁹ Check footnote 4.

²⁰ Check footnote 4.