

No.	Category	Credit Hours
1	University Requirements / Mandatory	18
2	University Requirements / Electives	3
3	Faculty Requirements / Mandatory	8
4	Faculty Requirements/ Electives	6
5	Specialization/Track Requirements / Mandatory	96
Total		131

1. University Requirements / Mandatory (18 credit hours)

Course Code	Course Title	Credit hours	Prerequisites	Equivalency
AR113	Arabic Communication Skills	3	--	
GB102	Principles of Entrepreneurship for Non-Specialists	3	--	
GR118	Life Skills and Coexistence	3	--	
GT101	Learning and Information Technology	3	--	
EL111	English Communication Skills I	3	EL099	
EL112	English Communication Skills II	3	EL111	
Total		Sum		

2. University Requirements / Electives (3 credit hours)

Course Code	Course Title	Course Level	Credit hours	Prerequisites	Equivalency
GR111	Arabic Islamic Civilization	1	3	--	
GR112	Issues and Problems of Development in the Arab World	1	3	--	
GR115	Current International Issues and Problems	1	3	--	
GR116	Youth Empowerment	1	3	--	
GR117	Women Empowerment	1	3	--	
GR121	Environment and Health	1	3	--	
GR131	General Branch Requirement	1	3	--	
CH101	Chinese for Beginners (I)	1	3	--	
CH102	Chinese for Beginners (II)	1	3	CH101	
SL101	Spanish for Beginners (I)	1	3	--	
SL102	Spanish for Beginners (II)	1	3	SL101	
FR101	French for Beginners (I)	1	3	--	
FR102	French for Beginners (II)	1	3	FR101	
Total			Sum		

3. Faculty Requirements / Mandatory

(8 credit hours)

Course Code	Course Title	Course Level	Credit hours	Prerequisite	Equivalency
MST129	Applied Calculus	1	4	EL099	MT129
TM260*	Ethics, Law and the Governance in IT	2	4	M238	
Total			Sum		

4. Faculty Requirements / Elective

(6 credit hours)

Course Code	Course Title	Course Level	Credit hours	Prerequisite	Equivalency
MS102	Physics	1	3	EL111	
M109	.NET Programming	1	3	EL111	
MT101	General Mathematics	1	3	-	
M115*	Python for ML and DS	1	3	M110	
TM338	Data Mining	3	3	MT249	
TM339	Big Data Analytics	3	3	MT249	
Total			Sum		

5. Specialization Requirements / Mandatory

(96 credit hours)

Course Code	Course Title	Course Level	Credit hours	Prerequisite	Equivalency
MT131	Discrete Mathematics	1	4	EL111	
MT132	Linear Algebra	1	4	EL111	
M110	Python Programming	1	8	EL111	TM111
TM112	Introduction to Computing and Information Technology	1	8	M110	
M140	Introducing Statistics	1	8	EL111	
M269	Algorithms, Data Structures and Computability	2	8	M110 & MT131	
MT248	Analysing data	2	4	M140	
MST224	Mathematical methods	2	8	MST129 & MT132	
MT249	Practical modern statistics	2	4	MT248	
M218	Relational Databases	2	4	M110 & MT131	
M238	Data Visualization	2	4	M110	
TM351	Data Management and Analysis	3	8	M269 or M251*	
M348	Applied statistical modelling	3	8	MT248	
TM358	Machine learning and artificial intelligence	3	8	M269	
TM471	Graduation Project (DS pathway)	3	8	M348 or TM358 or TM351**	
Total			Sum		