

**Department of Mathematics**  
**Academic Course Description**  
**General Mathematics Branch**

First year							
First semester				Second semester			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Calculus 1	3	-	3	Calculus 2	3	-	3
Fundamental of mathematics 1	3	-	3	Fundamental of mathematics 2	3	-	3
Linear Algebra 1	3	-	3	Linear Algebra 2	3	-	3
Mathematical methods	3	-	3	Physics	2	-	2
Computer 1	-	1	1	Computer 2	-	2	1
Human Rights	1	-	1	Arabic Language 2	1	-	1
Arabic Language 1	1	-	1	English Language	2	-	2
				Freedom and Democracy	1	-	1

Second year							
First semester				Second semester			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Advanced calculus	3	-	3	Ordinary differential equations	3	-	3
Method of ordinary differential equations solution	3	-	3	Applications in group theory	2	-	2
Finance mathematics	3	-	3	Hypothesis testing	2	-	2
Introduction of group theory	2	-	3	Algorithms and programming language	2	2	3
Principles of statistic	2	-	1	Vector analysis	2	-	2
Computer 3	-	1	1	Computer 4	-	2	1
Women and law	1	-	1	Civilian leaders	1	-	1
				English language	2	-	2

Third year							
First semester				Second semester			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
Mathematical Analysis 1	4	-	4	Mathematical analysis 2	4	-	4
Partial Differential Equations 1	3	-	3	Partial differential equations 2	3	-	3
Numerical Analysis 1	3	2	4	Numerical Analysis 2	3	1	4
Ring Theory	2	-	2	Mathematical statistic 2	3	-	3
Probability Theory	3	-	3	Module theory	3	-	3
Operation Research 1	3	-	3	Operation Research 2	3	-	3
English Language	2	-	2				
Scientific research method	1	-	1				

Fourth year							
First semester				Second semester			
Subject	Hours			Subject	Hours		
	THEO	Pract.	Units		THEO	Pract.	Units
General topology	3	1	3	Subjects in topology	3	1	3
Theory of differential equations 1	3	1	3	Theory of differential equations 2	3	1	3
Complex analysis 1	4	1	4	Complex analysis 2	4	1	4
Mathematical modeling	3	1	3	Biological mathematics	3	1	3
Functional analysis	3	1	3	Approximation theory	3	1	3
Integral equations	3	1	3	Graph theory	3	1	3
English language	2	-	2	Graduation Research project	2	-	2