

## 【 Department of Applied Mathematics 】

**2019 Bachelor's degree Courses Time Table :**

Classification	No.	Course Code	Subject	Required/ Selected	Credit	Hours	Grade
Required	1	KO1186	Calculus(Including Practice) (I)	Required	4	6	1
	2	KO1192	Calculus(Including Practice) (II)	Required	4	6	1
	3	KO1185	LinearAlgebra(Including Practice) (I)	Required	3	5	1
	4	KO1191	LinearAlgebra(Including Practice) (II)	Required	3	5	1
	5	KO1207	Advanced Calculus(including practice)(I)	Required	4	6	2
	6	KO1208	Advanced Calculus(including practice) (II)	Required	4	6	2
	7	KO1209	Algebra(Including Practice) (I)	Required	3	4	2
	8	KO1210	Algebra(Including Practice) (II)	Required	3	4	2
	9	KO1219	Elements of Complex Variables(Including Practice) (I)	Required	3	4	3
	10	KO1220	Elements of Complex Variables(Including Practice) (II)	Required	3	4	3
	11	KO1203	Probability and Statistics (Including Practice) (I)	Required	3	4	3
	12	KO1204	Probability and Statistics (Including Practice) (II)	Required	3	4	3
	13	KO1152	General Physics (I)	Required	3	3	1
	14	KO1153	General Physics (II)	Required	3	3	1
	15	KO1150	Introduction to Computer	Required	3	3	1

Classification	No.	Course Code	Subject	Required/ Selected	Credit	Hours	Grade
	16	KO1032	The Development of Mathematics Concept( I )	Required	2	2	1
Selected	17	KO1086	Introduction to Mathematics	Required	3	3	1
	18	KO1031	Elementary Number Theory	Required	3	3	1
	19	KO1198	Vector Calculus	Required	3	3	2
	20	KO1230	Matrix Analysis(I)	Required	3	3	2
	21	KO1231	Matrix Analysis( II )	Required	3	3	2
	22	KO1085	Vector Analysis	Required	3	3	2
	23	KO1222	Mathematics and Computer	Required	3	3	2
	24	KO1157	Introduction to Analysis	Required	3	3	3
	25	KO1058	Geometry(I)	Required	3	3	3
	26	KO1059	Geometry (II)	Required	3	3	3
	27	KO1202	Advanced Linear Algebra	Required	3	3	3
	28	KO1201	Elements of Real Variables	Required	3	3	4
	29	KO1223	History of Mathematics	Required	3	3	4
	30		Others				

**First Minor Program of Program of Applied Mathematics :**

Classification	No.	Course Code	Subject	Required/ Selected	Credit	Hours	Grade
Required	1	KO1155	Computer Programming	Required	3	3	2
	2	KO1182	Differential Equations(Including Practice)	Required	3	4	2
	3	KO1140	Discrete Mathematics(Including Practice)	Required	3	4	2
	4	KO1118	Numerical Analysis	Required	3	3	3
Selected	5	KO1022	Data Structure	Selected	3	3	2
	6	KO1158	Introduction to Dynamical Systems	Selected	3	3	2
	7	KO1181	Object-oriented Programming	Selected	3	3	2
	8	KO1095	Fundamental Graph Theory	Selected	3	3	3
	9	KO1079	Operation Research	Selected	3	3	3
	10	KO1183	Algorithm	Selected	3	3	3
	11	KO1217	Coding Theory	Selected	3	3	3
	12	KO1224	Mathematical Biology	Selected	3	3	3
	13	KO1229	Game Theory	Selected	3	3	3
	14	KO1227	Introduction to Cryptography	Selected	3	3	3
	15	KO1119	Combinatorics	Selected	3	3	3
	16	KO1122	Topics in Operation Research	Selected	3	3	3
	17	KO1188	Communications and Networks	Selected	3	3	3
	18	KO1197	Introduction to Partial Differential Equations	Selected	3	3	3

Classification	No.	Course Code	Subject	Required/ Selected	Credit	Hours	Grade
	19	KO1199	Chaotic Dynamical Systems	Selected	3	3	3
	20	KO1205	Numerical Linear Algebra	Selected	3	3	3
	21	KO1221	Mathematical Programming	Selected	3	3	3
	22	KO1193	Independent Study (I)	Selected	2	2	3
	23	KO1206	Independent Study (II)	Selected	2	2	4
	24	KO1124	Introduction of Financial Mathematics	Selected	3	3	4
	25	KO1146	Stochastic Process	Selected	3	3	4
	26	KO1232	Introduction to Applied Mathematics	Selected	3	3	4
	27	KO1125	Application of Financial Mathematics	Selected	3	3	4
	28	KO1189	Introduction to Scientific Computing	Selected	3	3	4
	29		Others				

## Second Minor Program of Applied Mathematics Education

Classification	No	Course Code	Subject	Required/ Selected	Credit	Hours	Grade
Required	1	KO1148	Introduction to Mathematical Education	Required	2	2	2
	2	KO1184	Mathematics Content Analysis in Elementary and Junior High School (I)	Required	2	2	2
	3	KO1200	Mathematics Content Analysis in Elementary and Junior High School (II)	Required	2	2	3
	4	KO1120	The Psychology of Mathematics Learning	Required	3	3	3
	5	KO1193	Independent Study (I)	Required	2	2	3
	6	KO1206	Independent Study (II)	Required	2	2	4
Selected	7	KO1057	The Development of Mathematics Concept( II )	Selected	2	2	2
	8	KO1226	Game Design of Graph Theory	Selected	3	3	2
	9	KO1127	Mathematics Gifted Education	Selected	3	3	3
	10	KO1139	Mathematical Education Literature Review	Selected	2	2	3
	11	KO1149	Philosophy of Mathematics Education	Selected	2	2	3
	12	KO1077	Evaluation of Mathematics Teaching	Selected	3	3	3
	13	KK1144	Design of Mathematics Curriculum	Selected	3	3	3
	14	KO1147	Diagnosis of Mathematics Learning	Selected	3	3	3

Classification	No	Course Code	Subject	Required/ Selected	Credit	Hours	Grade
	15	KO3100	Mathematical thinking and problem solving	Selected	3	3	3
	16	KO1123	Teaching Design of CAI in Mathematics	Selected	3	3	4
	17	KO1143	Teaching Practice in Mathematics	Selected	3	3	4
	18		Others				