

BURSA ULUDAĞ UNIVERSITY
2019-2020 ACADEMIC YEAR
ELECTIVE COURSES LIST

FAKÜLTE: SCIENCE and ARTS
BÖLÜM : MATHEMATICS

I.TERM/FALL SEMESTER					II.TERM/SPRING SEMESTER						
CODE	COURSE	COURSE HOUR PER WEEK				CODE	COURSE	COURSE HOUR PER WEEK			
		T	A	L	ECTS			T	A	L	ECTS
FIELD COURSES					FIELD COURSES						
NON-FIELD COURSES					NON-FIELD COURSES						
	NON-FIELD COURSE I					NON-FIELD COURSE I					
	NON-FIELD COURSE II					NON-FIELD COURSE II					
	TOTAL CREDITS					TOTAL CREDITS					

III.TERM/FALL SEMESTER					IV.TERM/SPRING SEMESTER						
CODE	COURSE	COURSE HOUR PER WEEK				CODE	COURSE	COURSE HOUR PER WEEK			
		T	A	L	ECTS			T	A	L	ECTS
FIELD COURSES					FIELD COURSES						
					MAT2018	MATRIX THEORY	3	0	0	4	
					MAT2020	SET THEORY	3	0	0	4	
					BMB2022	SPACIAL TOPICS with MAPLE	3	0	0	4	
					MAT2024	INTRODUCTION to GENEREL TOPOLOGY	3	0	0	4	
					MAT2026	CRYPTOLOGY	3	0	0	4	
NON-FIELD COURSES					NON-FIELD COURSES						
	NON-FIELD COURSE I	3	0	0	4	NON-FIELD COURSE I	3	0	0	4	
	NON-FIELD COURSE II					NON-FIELD COURSE II					
	TOTAL CREDITS				4	TOTAL CREDITS				8	

V.TERM/FALL SEMESTER					VI.TERM/SPRING SEMESTER						
CODE	COURSE	COURSE HOUR PER WEEK				CODE	DERSİN ADI	COURSE HOUR PER WEEK			
		T	A	L	ECTS			T	A	L	ECTS
FIELD COURSES					FIELD COURSES						
MAT3037	VECTORAL ANALYSIS	3	0	0	5	MAT3036	HISTORY of MATHEMATICS	3	0	0	5
MAT3039	MATHEMATICAL STATISTICS	3	0	0	5	MAT3044	NUMERICAL ANALYSIS	3	0	0	5
MAT3041	DIFFERENTIAL EQUATIONS SYSTEMS	3	0	0	5	MAT3050	INTEGRAL TRANSFORMATIONS	3	0	0	5
MAT3043	SPECIAL FUNCTIONS on MATHEMATICS	3	0	0	5	MAT3052	ANALYTIC NUMBER THEROY	3	0	0	5
BMB3047	LINEAR ALGEBRA and DIFFERANTIAL EQUATIONS with MAPLE	3	0	0	5	MAT3054	FOURIER SERIES and INTEGRALS	3	0	0	5
BMB3051	ADVANCED OBJECTIVE PROGRAMMING	3	0	0	5	BMB3056	SOFTWARE DEVELOPMENT TECHNIQUE	3	0	0	5
MAT3053	VECTORAL PRINCIPLES of GEOMETRY	3	0	0	5	MAT3058	TRANSFORMATIONS and GEOMETRIES II	3	0	0	5
MAT3057	TRANSFORMATIONS and GEOMETRIES I	3	0	0	5	MAT3060	NONLINEAR PARTIAL DIFFERENTIAL EQUATIONS	3	0	0	5
NON-FIELD COURSES					NON-FIELD COURSES						
	NON-FIELD COURSE I					NON-FIELD COURSE I					
	NON-FIELD COURSE II					NON-FIELD COURSE II					
	TOTAL CREDITS				5	TOTAL CREDITS				5	

VII.TERM/FALL SEMESTER					VIII.TERM/SPRING SEMESTER						
CODE	COURSE	COURSE HOUR PER WEEK				CODE	COURSE	COURSE HOUR PER WEEK			
		T	A	L	ECTS			T	A	L	ECTS
FIELD COURSES					FIELD COURSES						
MAT4033	GEOMETRIES	3	0	0	5	MAT4030	LINEAR PROGRAMMING	3	0	0	6
MAT4035	ANALYTIC FUNCTIONS	3	0	0	5	MAT4032	INTEGRAL EQUATIONS	3	0	0	6
MAT4041	THE METHODS OF APPLIED MATHEMATICS I	3	0	0	5	MAT4036	INTRODUCTION to DIFFERENTIABLE MANIFOLDS	3	0	0	6
MAT4043	FOURIER ANALYSIS	3	0	0	5	MAT4040	CONFORMAL MAPPINGS	3	0	0	6
MAT4047	ALGORITHM DEVELOPMENT	3	0	0	5	MAT4042	INTRODUCTION to RIEMANN SURFACES	3	0	0	6
MAT4063	NUMERICAL SOLUTIONS of DIFERENTIAL EQUATIONS	3	0	0	5	MAT4044	DESING GEOMETRY	3	0	0	6
MAT4077	ALGEBRAIC TOPOLOGY I	3	0	0	5	MAT4046	INTRODUCTION TO FIELD THEORY	3	0	0	6
MAT4081	INTRODUCTION to THE THEORY of ELLIPTIC CURVES	3	0	0	5	MAT4048	PROJECTIVE GEOMETRY	3	0	0	6
MAT4083	MATHEMATICS with MATLAB	3	0	0	5	MAT4050	MEASURE THEORY	3	0	0	6
MAT4085	FRACTAL GEOMETRY	3	0	0	5	MAT4062	BOUNDARY-VALUE PROBLEMS	3	0	0	6
BMB4087	COMPUTER AIDED DESIGN	3	0	0	5	MAT4066	THE METHODS of APPLIED MATHEMATICS II	3	0	0	6
MAT4089	APPLICATIONS OF LINEAR ALGEBRA	3	0	0	5	MAT4068	DIFFERENCE EQUATIONS	3	0	0	6
MAT4091	TENSOR ANALYSIS ON MANIFOLDS	3	0	0	5	MAT4070	QUADRATIC FORMS	3	0	0	6
MAT4093	SPECIAL FUNCTIONS	3	0	0	5	MAT4072	FUNCTIONAL ANALYSIS METHODS	3	0	0	6
MAT4095	INTRODUCTION TO GRAPH THEORY	3	0	0	5	BMB4076	WEB DESIGN	3	0	0	6
MAT4097	INTRODUCTION TO GEOMETRIC APPLICA	3	0	0	5	MAT4078	ALGEBRAIC TOPOLOGY II	3	0	0	6
MAT4099	INTRODUCTION to RING THEORY	3	0	0	5	MAT4082	INTRODUCTION to THE THEORY of ELLIPIC CURVES	3	0	0	6
MAT4107	THEORY OF SPECIAL NUMBERS	3	0	0	5	MAT4084	INTRODUCTION TO HYPERBOLIC MANIFOLD THEORY	3	0	0	6
						MAT4086	INEQUALITIES	3	0	0	6
						MAT4088	INFINITE SERIES	3	0	0	6
						MAT4090	ADVANCED GROUP THEORY	3	0	0	6
						MAT4094	INTRODUCTION TO MOLECULAR GRAPH THEORY	3	0	0	6
						MAT4096	TENSOR SPACES AND THEIR APPLICATIONS	3	0	0	6
						MAT4098	APPLICATIONS OF GEOMETRY	3	0	0	6
						MAT4100	GALOIS THEORY	3	0	0	6
						MAT4108	INTRODUCTION to ALGEBRAIC NUMBER THEORY	3	0	0	6
						MAT4110	MATHEMATICS With PYTHON	3	0	0	6
NON-FIELD COURSES					NON-FIELD COURSES						
	NON-FIELD COURSE I					NON-FIELD COURSE I					
	NON-FIELD COURSE II					NON-FIELD COURSE II					
	TOTAL CREDITS				15	TOTAL CREDITS				30	