ULUDAĞ UNIVERSITY
INSTITUTE OF NATURAL SCIENCES
2015-2016 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF MATHEMATICS
DEPARTMENT / PROGRAM /GRADUATE PROGRAM

COURSE STAGE

I. TERM / FALL								II. TERM / SPRING							
Code	**Course Title**	**Type**	**T**	**U**	**L**	**Credit**	**ECTS**	**Code**	**Course Title**	**Type**	**T**	**U**	**L**	**Credit**	**ECTS**
MAT5191	MA THESIS CONSULTING I	Z	0	1	0	0	1	MAT5192	MA THESIS CONSULTING II	Z	0	1	0	0	1
MAT5001	REEL ANALYSIS I	Z	3	0	0	3	6	MAT5172	SEMINAR (CLASS)	Z	0	2	0	0	6
MAT5319	FUNDAMENTAL CONCEPTS OF GEOMETRY	Z	3	0	0	3	6								
MAT5411	PARTIAL DİFFERENTIAL EQUATIONS I	Z	3	0	0	3	6								
MAT5205	ALGEBRA I	Z	3	0	0	3	6								
MAT5181	ADVANCED TOPICS IN MA THESIS I	S	4	0	0	0	5	MAT5182	ADVANCED TOPICS IN MA THESIS II	S	4	0	0	0	5
MAT5105	COMPLEX ANALYSIS I	S	3	0	0	3	6	MAT 5102	REAL ANALYSIS II	S	3	0	0	3	6
MAT5107	ADVANCED ANALYSIS I	S	3	0	0	3	6	MAT 5106	COMPLEX ANALYSIS II	S	3	0	0	3	6
MAT5111	MULTI VARIABLE ANALYSIS I	S	3	0	0	3	6	MAT 5108	ADVANCED ANALYSIS II	S	3	0	0	3	6
MAT5113	ADVANCED FUNCTIONAL ANALYSIS I	S	3	0	0	3	6	MAT5112	MULTI VARIABLE ANALYSIS II	S	3	0	0	3	6
MAT5117	FIELD THEORY I	S	3	0	0	3	6	MAT5114	ADVANCED FUNCTIONAL ANALYSIS II	S	3	0	0	3	6
MAT5119	RING THEORY I	S	3	0	0	3	6	MAT5118	FIELD THEORY II	S	3	0	0	3	6
MAT5121	DIOPHANT EQUATIONS I	S	3	0	0	3	6	MAT5120	RING THEORY II	S	3	0	0	3	6
MAT5123	GEOMETRIC FUNCTION THEORY I	S	3	0	0	3	6	MAT5122	DIOPHANT EQUATIONS II	S	3	0	0	3	6
MAT5125	ANALYTICAL NUMBER THEORY I	S	3	0	0	3	6	MAT5124	GEOMETRIC FUNCTION THEORY II	S	3	0	0	3	6
MAT5127	ADVANCED QUADRATIC FORMS I	S	3	0	0	3	6	MAT5126	ANALYTICAL NUMBER THEORY II	S	3	0	0	3	6
MAT5203	NUMBER THEORY I	S	3	0	0	3	6	MAT5128	ADVANCED QUADRATIC FORMS II	S	3	0	0	3	6
MAT5207	ALGEBRAIC NUMBER THEORY I	S	3	0	0	3	6	MAT 5204	NUMBER THEORY II	S	3	0	0	3	6
MAT5209	OTOMORF FUNCTIONS I	S	3	0	0	3	6	MAT 5206	ALGEBRA II	S	3	0	0	3	6
MAT5211	INTRODUCTIONS TO ALGEBRAIC GEOMETRY I	S	3	0	0	3	6	MAT 5208	ALGEBRAIC NUMBER THEORY II	S	3	0	0	3	6
MAT5215	MODULAR FORMS I	S	3	0	0	3	6	MAT 5210	OTOMORF FUNCTIONS II	S	3	0	0	3	6
MAT5217	GRAPH THEORI I	S	3	0	0	3	6	MAT5212	INTRODUCTİONS TOALGEBRAİC GEOMETRY II	S	3	0	0	3	6
MAT5219	TOPOLOGICAL GRAPH INDICES I	S	3	0	0	3	6	MAT5216	MODULAR FORMS II	S	3	0	0	3	6
MAT5305	GEOMETRIC MODELLING OF CURVES AND SURFACES I	S	3	0	0	3	6	MAT5218	GRAPH THEORI II	S	3	0	0	3	6
MAT5307	BASIC DIFFERENTIAL GEOMETRY	S	3	0	0	3	6	MAT5220	TOPOLOGICAL GRAPH INDICES II	S	3	0	0	3	6
MAT5309	ADVENCED PROJECTIVE GEOMETRY I	S	3	0	0	3	6	MAT 5302	ANALYSIS ON MANIFOLDS	S	3	0	0	3	6
MAT5311	LINEAR SPACES I	S	3	0	0	3	6	MAT 5306	GEOMETRIC MODELING OF CURVES AND SURFACES II	S	3	0	0	3	6
MAT5313	TAXICAB GEOMETRY	S	3	0	0	3	6	MAT 5310	ADVENCED PROJECTIVE GEOMETRY II	S	3	0	0	3	6
MAT5315	THEORY OF SUB-MANIFOLDS I	S	3	0	0	3	6	MAT 5312	LINEAR SPACES II	S	3	0	0	3	6
MAT5317	DIFFERENTIABLE MANIFOLDS I	S	3	0	0	3	6	MAT 5316	THEORY OF SUB-MANIFOLDS II	S	3	0	0	3	6

MAT5321	MAPLE APPLICATIONS	S	3	0	0	3	6	MAT 5318	DİFFERANTIABLE MANIFOLDS II	S	3	0	0	3	6
MAT5323	COORDINAT GEOMETRY I	S	3	0	0	3	6	MAT 5320	REAL PROJECTIVE GEOMETRY	S	3	0	0	3	6
MAT5325	GENERALIZED POLYGONS I	S	3	0	0	3	6	MAT5324	COORDINAT GEOMETRY II	S	3	0	0	3	6
MAT5327	GLOBAL LORENTZIAN GEOMETRY I	S	3	0	0	3	6	MAT5326	GENERALIZED POLYGONS II	S	3	0	0	3	6
MAT5405	ADVANCED NUMERICAL ANALYSIS I	S	3	0	0	3	6	MAT5328	GLOBAL LORENTZIAN GEOMETRY II	S	3	0	0	3	6
MAT5409	BOUNDARY VALUE PRABLEMS I	S	3	0	0	3	6	MAT 5406	ADVANCED NUMERICAL ANALYSIS II	S	3	0	0	3	6
MAT5415	TRANSFORMATION GROUPS AND LIE ALGEBRAS I						6	MAT 5410	BOUNDARY VALUE PROBLEMS II	S	3	0	0	3	6
								MAT 5412	PARTIAL DIFFERENTIAL EQUATIONS II	S	3	0	0	3	6
								MAT 5414	ELLIPTIK PARTIAL DIFFERANTIAL EQUATIONS	S	3	0	0	3	6
								MAT 5416	TRANSFORMATION GROUPS AND LIE ALGEBRAS II						6
					Total Credits	**12**	**30**						**Total Credits**	**9**	**30**
STAGE THESIS	**III. TERM / FALL**								**IV. TERM / SPRING**						
MAT5173	SEMINAR (THESIS)	Z	0	2	0	0	5	MAT5184	ADVANCED TOPICS IN MA THESIS IV	Z	4	0	0	0	5
MAT5183	ADVANCED TOPICS IN MA THESIS III	Z	4	0	0	0	5	MAT5194	MA THESIS IV	Z	0	1	0	0	25
MAT5193	MA THESIS III	Z	0	1	0	0	20								
					Total Credits	**0**	**30**						**Total Credits**	**0**	**30**
					TOTAL CREDITS: 21				**- TOTAL ECTS: 120**						

Not: The student is expected to take a total of ……. credited ……. selective courses every academic term.
The student have the option of choosing one selective course from another department with the endorsement of the supervisor.

ULUDAĞ UNIVERSITY
INSTITUTE OF NATURAL SCIENCES
2015-2016 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF	**Mathematics**
DEPARTMENT / PROGRAM	/ Doctoral Program

COURSE STAGE

I. TERM / FALL

Code	Course Title	Type	T	U	L	Credit	ECTS
MAT6191	PHD THESIS CONSULTING I	Z	0	1	0	0	1
FEN6001	RESEARCH METHODS	Z	2	0	0	2	4
MAT6107	FUNETIONS OF COMPLEX VARIABLES I	Z	3	0	0	3	5
MAT6303	ADVENCED DIFFERANTIAL GEOMETRY	Z	3	0	0	3	5
MAT6401	GENERALIZED ANALYTİC FUNCTIONS I	Z	2	2	0	3	5
MAT6181	ADVANCED TOPICS IN PHD THESIS I	S	4	0	0	0	5
MAT6103	RIEMANN SURFACES I	S	3	0	0	3	5
MAT6105	UNIVALENT FUNCTIONS I	S	3	0	0	3	5
MAT6109	HARMONIC MAPPINGS I	S	3	0	0	3	5
MAT6111	THEORY OF ELLIPTIC CURVES AND ITS APPLICALTIONS I	S	2	2	0	3	5
MAT6117	P-ADIC ANALYSIS I	S	3	0	0	3	5
MAT6201	ABSTRACT ALGEBRA I	S	3	0	0	3	5
MAT6205	GEOMETRIC NUMBER THEORY I	S	3	0	0	3	5
MAT6207	ADVANCED ANALYTİC NUMBER THEORY I	S	2	2	0	3	5
MAT6213	APPLIED GRAPH THEORI I	S	3	0	0	3	5
MAT6215	SPECTRAL GRAPH THEORI I	S	3	0	0	3	5
MAT6307	ALGEBRAIC GEOMETRY I	S	2	2	0	3	5
MAT6309	COMBINATORIAL GEOMETRY	S	3	0	0	3	5
MAT6311	ALGEBRAIC STRUCTURES AND PROJECTIVE GEOMETRIES I	S	3	0	0	3	5
MAT6313	AFFİNE AND PROJECTİVE GEOMETRY	S	3	0	0	3	5
MAT6315	RIEMANNIAN GEOMETRY I	S	3	0	0	3	5
MAT6317	SEMI-RIEMANN GEOMETRY I	S	3	0	0	3	5

II. TERM / SPRING

Code	Course Title	Type	T	U	L	Credit	ECTS
MAT6192	PHD THESIS CONSULTING II	Z	0	1	0	0	1
MAT6172	SEMINAR (CLASS)	Z	0	2	0	0	4
MAT6182	ADVANCED TOPICS IN PHD THESIS II	S	4	0	0	0	5
MAT6104	RIEMANN SURFACES II	S	2	2	0	3	5
MAT6106	UNIVALENT FUNCTIONS II	S	3	0	0	3	5
MAT6108	COMPLEX FUNCTIONS II	S	3	0	0	3	5
MAT6110	HARMONIC MAPPINGS II	S	3	0	0	3	5
MAT6112	THEORY OF ELLIPTIC CURVES AND ITS APPLICATIONS II	S	3	0	0	3	5
MAT6118	P-ADIC ANALYSIS II	S	2	2	0	3	5
MAT6202	ABSTRACT ALGEBRA II	S	2	2	0	3	5
MAT6206	GEOMETRIC NUMBER THEORY II	S	2	2	0	3	5
MAT6208	ADVANCED ANALYTIC NUMBER THEORY II	S	3	0	0	3	5
MAT6214	APPLIED GRAPH THEORI II	S	3	0	0	3	5
MAT6216	SPECTRAL GRAPH THEORI II	S	3	0	0	3	5
MAT6302	CONTACT MANIFOLDS	S	3	0	0	3	5
MAT6304	ADVANCED DIFFERENTIAL GEOMETRY II	S	2	2	0	3	5
MAT6308	ALGEBRAIC GEOMETRY II	S	2	2	0	3	5
MAT6310	DIAGRAM GEOMETRİES AND GEOMETRIC STRUCTURES	S	3	0	0	3	5
MAT6312	ALGEBRAIC STRUCTURES AND PROJECTIVE GEOMETRY II	S	3	0	0	3	5

	MAT6319	THEORY OF TANGENT AND COTANGENT BUNDLES	S	3	0	0	3	5	MAT6316	RIEMANIAN GEOMETRY II	S	3	0	0	3	5
	MAT6321	PROJECTIVE GEOMETRI in NONASSOCIATIVE ALGEBRAS I	S	3	0	0	3	5	MAT6318	SEMI-RIEMANIAN GEOMETRY II	S	3	0	0	3	5
	MAT6323	LOCAL RİNGS I	S	3	0	0	3	5	MAT6320	VECTORIAL APPROACH METHODS TO GEOMETRY	S	3	0	0	3	5
	MAT6405	ADVANCED PARTIAL DIFFERANTIAL EQUATIONS	S	3	0	0	3	5	MAT6322	PROJECTIVE GEOMETRI in NONASSOCIATIVE ALGEBRAS II	S	3	0	0	3	5
	MAT6407	GENERAL ANALYTIC FUNCTIONS	S	3	0	0	3	5	MAT6324	LOCAL RİNGS II	S	3	0	0	3	5
	MAT6413	SLECTED TOPICS IN PARTIAL DIFFERANTIAL EQUATIONS	S	3	0	0	3	5	MAT6402	GENERALIZED ANALYTIC FUNCTIONS II	S	3	0	0	3	5
	MAT6415	LIE GROUPS and CONSEVATION LAWS I	S	3	0	0	3	5	MAT6406	ADVANCED SPECIAL FUNCTIONS	S	3	0	0	3	5
									MAT6416	LIE GROUPS and CONSEVATION LAWS II	S	3	0	0	3	5
			Toplam Kredi				**14**	**30**			**Toplam Kredi**				**12**	**30**
STAGE THESIS	**III. TERM / FALL**								**IV. TERM / SPRING**							
	MAT6183	ADVANCED TOPICS IN PHD THESIS III	Z	4	0	0	0	5	MAT6184	ADVANCED TOPICS IN PHD THESIS IV	Z	4	0	0	0	5
	MAT6193	PHD THESIS III	Z	0	1	0	0	15	MAT6194	PHD THESIS IV	Z	0	1	0	0	20
	MAT6177	PHD PROFICIENCY EXAMINATION	Z	0	0	0	0	10	MAT6174	SEMINAR(THESIS)	Z	0	2	0	0	5
			Toplam Kredi				**0**	**30**			**Toplam Kredi**				**0**	**30**
	V. TERM / FALL								**VI. TERM / SPRING**							
	ENS6121	DEVELOPMENT AND LEARNING	Z	3	0	0	0	5	ENS6122	PLANNING AND EVALUATION IN EDUCATION	Z	3	2	0	0	5
	MAT6185	ADVANCED TOPICS IN PHD THESIS V	Z	4	0	0	0	5	MAT6186	ADVANCED TOPICS IN PHD THESIS VI	Z	4	0	0	0	5
	MAT6195	PHD THESIS V	Z	0	1	0	0	20	MAT6196	PHD THESIS VI	Z	0	1	0	0	20
			Toplam Kredi				**0**	**30**			**Toplam Kredi**				**0**	**30**
	VII. TERM / FALL								**VIII. TERM / SPRING**							
	MAT6187	ADVANCED TOPICS IN PHD THESIS VII	Z	4	0	0	0	5	MAT6188	ADVANCED TOPICS IN PHD THESIS VIII	Z	4	0	0	0	5
	MAT6197	PHD THESIS VII	Z	0	1	0	0	25	MAT6198	PHD THESIS VIII	Z	0	1	0	0	25
			Toplam Kredi				**0**	**30**			**Toplam Kredi**				**0**	**30**
TOTAL CREDITS: 26 - TOTAL ECTS: 240																

Not: The student is expected to take a total of ……. credited ……. selective courses every academic term.
The student have the option of choosing one selective course from another department with the endorsement of the supervisor. *Success in Ph.D. qualifying exam is a prerequisite.

ULUDAĞ UNIVERSITY
INSTITUTE OF NATURAL SCIENCES
2015-2016 ACADEMIC YEAR COURSE PLAN

DEPARTMENT OF **Mathematics**
DEPARTMENT / PROGRAM **/ Unified Doctoral Program**

COURSE STAGE

I. TERM / FALL								II. TERM / SPRING							
Code	**Course Title**	**Type**	**T**	**U**	**L**	**Credit**	**ECTS**	**Code**	**Course Title**	**Type**	**T**	**U**	**L**	**Credit**	**ECTS**
MAT6191	PHD THESIS CONSULTING I	Z	0	1	0	0	1	MAT6192	PHD THESIS CONSULTING I	Z	0	1	0	0	1
MAT5001	REEL ANALYSIS I	Z	3	0	0	3	6								
MAT5319	FUNDAMENTAL CONCEPTS OF GEOMETRY	Z	3	0	0	3	6								
MAT5411	PARTIAL DİFFERENTIAL EQUATIONS I	Z	3	0	0	3	6								
MAT5205	ALGEBRA I	Z	3	0	0	3	6								
MAT6181	ADVANCED TOPICS IN PHD THESIS I	S	4	0	0	0	5	MAT6182	ADVANCED TOPICS IN PHD THESIS II	S	4	0	0	0	5
MAT5105	COMPLEX ANALYSIS I	S	3	0	0	3	6	MAT 5102	REAL ANALYSIS II	S	3	0	0	3	6
MAT5107	ADVANCED ANALYSIS I	S	3	0	0	3	6	MAT 5106	COMPLEX ANALYSIS II	S	3	0	0	3	6
MAT5111	MULTI VARIABLE ANALYSIS I	S	3	0	0	3	6	MAT 5108	ADVANCED ANALYSIS II	S	3	0	0	3	6
MAT5113	ADVANCED FUNCTIONAL ANALYSIS I	S	3	0	0	3	6	MAT5112	MULTI VARIABLE ANALYSIS II	S	3	0	0	3	6
MAT5117	FIELD THEORY I	S	3	0	0	3	6	MAT5114	ADVANCED FUNCTIONAL ANALYSIS II	S	3	0	0	3	6
MAT5119	RING THEORY I	S	3	0	0	3	6	MAT5118	FIELD THEORY II	S	3	0	0	3	6
MAT5121	DIOPHANT EQUATIONS I	S	3	0	0	3	6	MAT5120	RING THEORY II	S	3	0	0	3	6
MAT5123	GEOMETRIC FUNCTION THEORY I	S	3	0	0	3	6	MAT5122	DIOPHANT EQUATIONS II	S	3	0	0	3	6
MAT5125	ANALYTICAL NUMBER THEORY I	S	3	0	0	3	6	MAT5124	GEOMETRIC FUNCTION THEORY II	S	3	0	0	3	6
MAT5127	ADVANCED QUADRATIC FORMS I	S	3	0	0	3	6	MAT5126	ANALYTICAL NUMBER THEORY II	S	3	0	0	3	6
MAT5203	NUMBER THEORY I	S	3	0	0	3	6	MAT5128	ADVANCED QUADRATIC FORMS II	S	3	0	0	3	6
MAT5207	ALGEBRAIC NUMBER THEORY I	S	3	0	0	3	6	MAT 5204	NUMBER THEORY II	S	3	0	0	3	6
MAT5209	OTOMORF FUNCTIONS I	S	3	0	0	3	6	MAT 5206	ALGEBRA II	S	3	0	0	3	6
MAT5211	INTRODUCTIONS TO ALGEBRAIC GEOMETRY I	S	3	0	0	3	6	MAT 5208	ALGEBRAIC NUMBER THEORY II	S	3	0	0	3	6
MAT5215	MODULAR FORMS I	S	3	0	0	3	6	MAT 5210	OTOMORF FUNCTIONS II	S	3	0	0	3	6
MAT5217	GRAPH THEORI I	S	3	0	0	3	6	MAT5212	INTRODUCTİONS TOALGEBRAİC GEOMETRY II	S	3	0	0	3	6
MAT5219	TOPOLOGICAL GRAPH INDICES I	S	3	0	0	3	6	MAT5216	MODULAR FORMS II	S	3	0	0	3	6
MAT5305	GEOMETRIC MODELLING OF CURVES AND SURFACES I	S	3	0	0	3	6	MAT5218	GRAPH THEORI II	S	3	0	0	3	6
MAT5307	BASIC DIFFERENTIAL GEOMETRY	S	3	0	0	3	6	MAT5220	TOPOLOGICAL GRAPH INDICES II	S	3	0	0	3	6
MAT5309	ADVENCED PROJECTIVE GEOMETRY I	S	3	0	0	3	6	MAT 5302	ANALYSIS ON MANIFOLDS	S	3	0	0	3	6
MAT5311	LINEAR SPACES I	S	3	0	0	3	6	MAT 5306	GEOMETRIC MODELING OF CURVES AND SURFACES II	S	3	0	0	3	6
MAT5313	TAXICAB GEOMETRY	S	3	0	0	3	6	MAT 5310	ADVENCED PROJECTIVE GEOMETRY II	S	3	0	0	3	6
MAT5315	THEORY OF SUB-MANIFOLDS I	S	3	0	0	3	6	MAT 5312	LINEAR SPACES II	S	3	0	0	3	6
MAT5317	DIFFERENTIABLE MANIFOLDS I	S	3	0	0	3	6	MAT 5316	THEORY OF SUB-MANIFOLDS II	S	3	0	0	3	6
MAT5321	MAPLE APPLICATIONS	S	3	0	0	3	6	MAT 5318	DİFFERANTIABLE MANIFOLDS II	S	3	0	0	3	6
MAT5323	COORDINAT GEOMETRY I	S	3	0	0	3	6	MAT 5320	REAL PROJECTIVE GEOMETRY	S	3	0	0	3	6
MAT5325	GENERALIZED POLYGONS I	S	3	0	0	3	6	MAT5324	COORDINAT GEOMETRY II	S	3	0	0	3	6
MAT5327	GLOBAL LORENTZIAN GEOMETRY I	S	3	0	0	3	6	MAT5326	GENERALIZED POLYGONS II	S	3	0	0	3	6

MAT5405	ADVANCED NUMERICAL ANALYSIS I	S	3	0	0	3	6	MAT5328	GLOBAL LORENTZIAN GEOMETRY II	S	3	0	0	3	6
MAT5409	BOUNDARY VALUE PRABLEMS I	S	3	0	0	3	6	MAT 5406	ADVANCED NUMERICAL ANALYSIS II	S	3	0	0	3	6
MAT5415	TRANSFORMATION GROUPS AND LIE ALGEBRAS I						6	MAT 5410	BOUNDARY VALUE PROBLEMS II	S	3	0	0	3	6
								MAT 5412	PARTIAL DIFFERENTIAL EQUATIONS II	S	3	0	0	3	6
								MAT 5414	ELLIPTIK PARTIAL DIFFERANTIAL EQUATIONS	S	3	0	0	3	6
								MAT 5416	TRANSFORMATION GROUPS AND LIE ALGEBRAS II						6
			Toplam Kredi			**12**	**30**				**Toplam Kredi**			**12**	**30**	
III. TERM / FALL								**IV. TERM / SPRING**								
MAT6193	PHD THESIS CONSULTING III	Z	0	1	0	0	1	MAT6194	PHD THESIS CONSULTING IV	Z	0	1	0	0	1
FEN6001	RESEARCH METHODS	Z	2	0	0	2	4	MAT6172	SEMINAR (CLASS)	Z	0	2	0	0	4
MAT6107	FUNETIONS OF COMPLEX VARIABLES I	Z	3	0	0	3	5								
MAT6303	ADVENCED DIFFERANTIAL GEOMETRY	Z	3	0	0	3	5								
MAT6401	GENERALIZED ANALYTİC FUNCTIONS I	Z	2	2	0	3	5								
MAT6183	ADVANCED TOPICS IN PHD THESIS III	S	4	0	0	0	5	MAT6184	ADVANCED TOPICS IN PHD THESIS IV	S	4	0	0	0	5
MAT6103	RIEMANN SURFACES I	S	3	0	0	3	5	MAT6104	RIEMANN SURFACES II	S	2	2	0	3	5
MAT6105	UNIVALENT FUNCTIONS I	S	3	0	0	3	5	MAT6106	UNIVALENT FUNCTIONS II	S	3	0	0	3	5
MAT6109	HARMONIC MAPPINGS I	S	3	0	0	3	5	MAT6108	FUNETIONS OF COMPLEX VARIABLES II	S	3	0	0	3	5
MAT6111	THEORY OF ELLIPTIC CURVES AND ITS APPLICALTIONS I	S	2	2	0	3	5	MAT6110	HARMONIC MAPPINGS II	S	3	0	0	3	5
MAT6117	P-ADIC ANALYSIS I	S	3	0	0	3	5	MAT6112	THEORY OF ELLIPTIC CURVES AND ITS APPLICATIONS II	S	3	0	0	3	5
MAT6201	ABSTRACT ALGEBRA I	S	3	0	0	3	5	MAT6118	P-ADIC ANALYSIS II	S	2	2	0	3	5
MAT6205	GEOMETRIC NUMBER THEORY I	S	3	0	0	3	5	MAT6202	ABSTRACT ALGEBRA II	S	2	2	0	3	5
MAT6207	ADVANCED ANALYTİC NUMBER THEORY I	S	2	2	0	3	5	MAT6206	GEOMETRIC NUMBER THEORY II	S	2	2	0	3	5
MAT6213	APPLIED GRAPH THEORI I	S	3	0	0	3	5	MAT6208	ADVANCED ANALYTIC NUMBER THEORY II	S	3	0	0	3	5
MAT6215	SPECTRAL GRAPH THEORI I	S	3	0	0	3	5	MAT6214	APPLIED GRAPH THEORI II	S	3	0	0	3	5
MAT6307	ALGEBRAIC GEOMETRY I	S	2	2	0	3	5	MAT6216	SPECTRAL GRAPH THEORI II	S	3	0	0	3	5
MAT6309	COMBINATORIAL GEOMETRY	S	3	0	0	3	5	MAT6302	CONTACT MANIFOLDS	S	3	0	0	3	5
MAT6311	ALGEBRAIC STRUCTURES AND PROJECTIVE GEOMETRIES I	S	3	0	0	3	5	MAT6304	ADVANCED DIFFERENTIAL GEOMETRY II	S	2	2	0	3	5
MAT6313	AFFİNE AND PROJECTİVE GEOMETRY	S	3	0	0	3	5	MAT6308	ALGEBRAIC GEOMETRY II	S	2	2	0	3	5
MAT6315	RIEMANNIAN GEOMETRY I	S	3	0	0	3	5	MAT6310	DIAGRAM GEOMETRİES AND GEOMETRIC STRUCTURES	S	3	0	0	3	5
MAT6317	SEMI-RIEMANN GEOMETRY I	S	3	0	0	3	5	MAT6312	ALGEBRAIC STRUCTURES AND PROJECTIVE GEOMETRY II	S	3	0	0	3	5
MAT6319	THEORY OF TANGENT AND COTANGENT BUNDLES	S	3	0	0	3	5	MAT6316	RIEMANIAN GEOMETRY II	S	3	0	0	3	5
MAT6321	PROJECTIVE GEOMETRI in NONASSOCIATIVE ALGEBRAS I	S	3	0	0	3	5	MAT6318	SEMI-RIEMANIAN GEOMETRY II	S	3	0	0	3	5
MAT6323	LOCAL RİNGS I	S	3	0	0	3	5	MAT6320	VECTORIAL APPROACH METHODS TO GEOMETRY	S	3	0	0	3	5
MAT6405	ADVANCED PARTIAL DIFFERANTIAL EQUATIONS	S	3	0	0	3	5	MAT6322	PROJECTIVE GEOMETRI in NONASSOCIATIVE ALGEBRAS II	S	3	0	0	3	5

MAT6407	GENERAL ANALYTIC FUNCTIONS	S	3	0	0	3	5	MAT6324	LOCAL RİNGS II	S	3	0	0	3	5
MAT6413	SLECTED TOPICS IN PARTIAL DIFFERANTIAL EQUATIONS	S	3	0	0	3	5	MAT6402	GENERALIZED ANALYTIC FUNCTIONS II	S	3	0	0	3	5
MAT6415	LIE GROUPS and CONSEVATION LAWS I	S	3	0	0	3	5	MAT6406	ADVANCED SPECIAL FUNCTIONS	S	3	0	0	3	5
								MAT6416	LIE GROUPS and CONSEVATION LAWS II	S	3	0	0	3	5
		Toplam Kredi				**14**	**30**			**Toplam Kredi**				**12**	**30**
STAGE THESIS	**V. TERM / FALL**							**VI. TERM / SPRING**							
MAT6185	ADVANCED TOPICS IN PHD THESIS V	Z	4	0	0	0	5	MAT6186	ADVANCED TOPICS IN PHD THESIS VI	Z	4	0	0	0	5
MAT6195	PHD THESIS V	Z	0	0	0	0	15	MAT6196	PHD THESIS VI	Z	0	0	0	0	20
MAT6177	PHD PROFICIENCY EXAMINATION	Z	0	0	0	0	10	MAT6174	SEMINAR(THESIS)	Z	0	2	0	0	5
		Toplam Kredi				**0**	**30**			**Toplam Kredi**				**0**	**30**
	VII. TERM / FALL							**VIII. TERM / SPRING**							
ENS6121	DEVELOPMENT AND LEARNING	Z	3	0	0	0	5	ENS6122	PLANNING AND EVALUATION IN EDUCATION	Z	3	2	0	0	5
MAT6187	ADVANCED TOPICS IN PHD THESIS VII	Z	4	0	0	0	5	MAT6188	ADVANCED TOPICS IN PHD THESIS VIII	Z	3	0	0	0	5
MAT6197	PHD THESIS VII	Z	0	0	0	0	20	MAT6198	PHD THESIS VIII	Z	0	0	0	0	20
		Toplam Kredi				**0**	**30**	**Toplam Kredi**						**0**	**30**
	IX. TERM / FALL							**X. TERM / SPRING**							
MAT6189	ADVANCED TOPICS IN PHD THESIS IX	Z	4	0	0	0	5	MAT6190	ADVANCED TOPICS IN PHD THESIS X	Z	3	0	0	0	
MAT6199	PHD THESIS IX	Z	0	0	0	0	25	MAT6290	PHD THESIS X	Z	0	0	0	0	
		Toplam Kredi				**0**	**30**							**Toplam Kredi**	

TOTAL CREDITS:50 - TOTAL ECTS: 300

Not: The student is expected to take a total of ……. credited ……. selective courses every academic term.
The student have the option of choosing one selective course from another department with the endorsement of the supervisor. *Success in Ph.D. qualifying exam is a prerequisite.