

İTÜ
LİSANS ÜSTÜ DERS KATALOG FORMU
(GRADUATE COURSE CATALOGUE FORM)

Dersin Adı			Course Name		
Number Theory			Number Theory		
Kodu (Code)	Yarıyılı (Semester)	Kredisi (Local Credits)	AKTS Kredisi (ECTS Credits)	Ders Türü (Course Type)	
MAT 614E	Bahar/Güz Fall/Spring	3.0	7.5	Doktora Ph.D.	
Enstitü/ABD/Program (Institute/ Department /Program)		Matematik Mühendisliği (Mathematics Engineering)			
Dersin Türü (Course Type)		Seçmeli (Elective)	Dersin Dili (Course Language)	Güz,Bahar Fall, Spring	
Dersin İçeriği (Course Description)		Bölünebilirlik, Asal sayılar, Binom teoremi, Kongrüanslar, Lineer Kongrüanslar, Çinlilerin kalan teoremi, Primitif kökler, Kuadratik kongrüanslar, Kuadratik rezidüler, Kuadratik Karşılık, İkili kuadratik formlar, İndirgeme teorisi, İki kare toplamı, Sayı temsilleri, Aritmetik fonksiyonlar, Möbius ters formülü, Diofant denklemler, Sürekli kesirler, Pell denklemi. Divisibility, Prime numbers, Binomial theorem, Congruances, Linear Congruances, Chinese remainder theorem, Primitive roots, Quadratic congruances, Quadratic residues, Quadratic reciprocity, Binary quadratic forms, Reduction theory, Sums of two squares, Representation of numbers, Arithmetic functions, Möbius inversion formula, Continued fractions, Pell's equation, Diophantine equations.			