

foreign language requirement may be met by the passing of a proficiency examination.

<b>Master of Arts Degree in Mathematics</b>		<b>Units</b>
Math 205, 207, 211 or 215, 231 or 232, 241, 290 or 299.....		17-18
Math electives (200 series, exclude 202) .....		4-3
Electives (u.d.) .....		9
		30

<b>Master of Science Degree in Mathematics</b>		
Math 205, 207, 221, 290 or 299.....		12
Math electives (200 series, exclude 202) .....		9
Electives (u.d.) .....		9
		30

## Courses

## MATHEMATICS

### B. Intermediate Algebra (3)

Prerequisite: elementary algebra and geometry. Rapid review of fundamentals of elementary algebra, fractions, factoring, simultaneous equations, functions and their graphs, exponents, logarithms, progressions, quadratic equations, ratios and variations, binomial theorem. (See *Duplication of Courses*.)

### C. Trigonometry (3)

Prerequisite: Math B. Concept of a function, sine and cosine functions, tables and graphs, other trigonometric functions, identities and equations, trigonometric functions of angles, solution of triangles, logarithms. (See *Duplication of Courses*.)

### 2. Mathematics of Finance (3)

For business students. Prerequisite: Math B or 2 years high school algebra. Development of mathematical relations between investment and income; compound interest, annuities, sinking fund, depreciation, amortization, and bonds.

### 3. Mathematical Analysis I (5)

Prerequisite: two years of high school algebra, one year of plane geometry, trigonometry. Field postulates, the real numbers, function and its graph, linear function, sets, finite induction, vectors and complex numbers, limit, derivative, continuity, applications of differentiation, polynomials, integration.

### 4. Mathematical Analysis II (5)

Prerequisite: Math 3. Rational functions, periodic functions, trigonometric functions, inverse functions, polar coordinates, exponential and logarithmic functions, conic sections, parametric representation of curves, determinants and matrices, functions of two variables, probability.

### 6. Mathematical Analysis III (3)

Prerequisite: Math 4. Techniques of integration, applications, infinite series, calculus of functions of several variables, hyperbolic functions, Taylor's theorem.

### 7A-B. Intermediate Mathematical Analysis III-IV (3-3)

Prerequisite: Math 4. Hyperbolic functions, techniques of integration, improper integrals, theory of plane curves, Taylor's theorem, numerical methods; infinite series, Fourier series, calculus of functions of several variables, introduction to differential equations.