Math Options

Course	Majors
Math 1015 and 1016	Accepted for all majors except those that require Math 1205/1206 or Math 1535/1536. Required for students who need Math 1205 but have not passed the readiness test (80% is passing).
Math 1525 and 1526	Recommended for majors in the Pamplin College of Business and other business-related majors such as Ag Econ, AHRM (Apparel Product Development and Merchandising Mgmt option), Food Sci & Tech (tech option), International Studies (business option)
Math 1535 and 1536	Required for Architecture, Industrial Design, Interior Design, and Landscape Architecture.
Math 1205 and 1206	Required for Computer Science, Engineering, Math, Building Construction, Geosciences, Physics, BS Chemistry. Recommended for Econ. *Majors that require 1205 also require 1114.*
MaSc 1024 (Credit by exam only) and Stat 2004 This math sequence is **ONLY** accepted by the majors listed. If you are not 100% sure you will major in one of these areas, **do not** choose this math sequence.	Accepted for Art, AHRM (Housing option), Communication, English, Foreign Language, History, International Studies, Music, Philosophy, Poli Sci Psych, Sociology, Theatre Arts

COURSE DESCRIPTIONS

1015-1016: ELEMENTARY CALCULUS WITH TRIGONOMETRY I
1015: College algebra, functions, exponentials and logarithms, matrices, sequences and series. 1016: Calculus including limits, derivatives, applications of derivatives, trigonometric functions. ***These are on-line courses.***

1114: ELEMENTARY LINEAR ALGEBRA
Euclidean vectors, complex numbers, and topics in linear algebra including linear systems, matrices, determinants, eigenvalues, and bases in Euclidean space. ***1114 is an on-line course.*** *1114H is not, but it is only for students in the Virginia Tech Honors Program.*

1205-1206-1206H: CALCULUS
Unified calculus course including techniques and applications of differentiation and integration of functions of a single variable. Limits, continuity, differentiation, integration, and transcendental functions. 1206*H is only for students in the Virginia Tech Honors Program.*

1224: VECTOR GEOMETRY
Topics in analytic geometry and conic sections, and the calculus of vector-valued functions.

1525-1526: ELEMENTARY CALCULUS WITH MATRICES
1525: Modeling, linear, quadratic, exponential and logarithmic functions, limits, derivatives. 1526: Integration with applications, matrix algebra and solving systems of equations, multivariable calculus.
These are on-line courses.

1535,1536: GEOMETRY & MATHEMATICS OF DESIGN
1535: Review of Euclidean geometry and trigonometry. Descriptive and projective geometry applied to drawing. Similarity, proportion, and the golden mean. Applications of graph theory. 1536: Calculus with applications to max/min, areas, volumes, and centroids. Polygons, patterns, and tilings of the plane. Polyhedra and vectors applied to 3-dimensional design. ***These are on-line courses.***

2015: ELEMENTARY CALCULUS WITH TRIG II
Continuation of Math 1015-1016. 2015: Trigonometric calculus, indefinite integrals, definite integration, areas and volumes, multivariable differential calculus.

Math Science (MaSC)
1024: MATHEMATICS, A LIBERAL ARTS APPROACH
This is the first course in a sequence that is intended to give those students who will not make extensive use of the Mathematical Sciences in their specialties. Topics include set theory, number theory, and modular arithmetic. *Credit for MaSc 1024 can only be earned through credit-by-exam.*

Statistics (Stat)
2004: Fundamental concepts and methods of statistics with emphasis on interpretation of statistical arguments. An introduction to design of experiments, data analysis, correlation and regression, concepts of probability theory, sampling errors, confidence intervals, and hypothesis tests.