MATHEMATICS

FOUNDATION COURSES REQUIRED OF ALL MAJORS:
* The full sequence of Calculus I, II, III, IV (V1101, V1102, V1201, V1202).

Midd MATH 121 - Calculus I
Midd MATH 122 - Calculus II
Midd MATH 223 - Multivariable Calculus
(Note: unlike for Dartmouth, Midd PHYS 212 CANNOT be substituted for Midd MATH 223)

REQUIRED MAJOR SPECIFIC COURSES
* Linear Algebra (MATH V2010 or APAM E3101)
Midd MATH 200 - Linear Algebra

* Ordinary Differential Equations (E1210)
Midd MATH 225 - Topics in Linear Algebra and Differential Equations

* Introduction to applied mathematics Ordinary Differential Equations & Linear Algebra (APMA E2101).
  Students who take an ODE course must also take a Linear Algebra course.
Midd MATH 200 AND MATH 225

* Probability (IEOR E3658)
Midd MATH 310 - Probability

* Statistical Inference (W3659 -> renumbered W3107??)
  Please note that the course must have calculus as a pre-requisite.
Midd MATH 311 - Statistics
(Note: Midd ECON 210 or Midd PSYC 201 cannot be substituted)

* Introduction to Probability and Statistics (W3600)
  Please note that the course must have calculus as a pre-requisite.
  The Department strongly suggests taking two separate courses: one in Probability and one in Statistics.
Midd MATH 310; and MATH 311 strongly recommended

PHYSICS

FOUNDATION COURSES REQUIRED OF ALL MAJORS:
* Mechanics and Thermodynamics (C1401)
* Electricity, Magnetism, and Optics (C1402)
Midd PHYS 109 - Newtonian Physics
Midd PHYS 110 - Electricity and Magnetism
strongly recommended:
Midd PHYS 111 - Thermodynamics, Fluids, Wave Motion, and Optics (a winter-term course)

REQUIRED MAJOR SPECIFIC COURSES

* Classical and Quantum Waves (C1403)
  Midd PHYS 111 - Thermodynamics, Fluids, Wave Motion, and Optics
  Midd PHYS 202 - Quantum Physics Applications

CHEMISTRY
[Midd course listings at http://www.middlebury.edu/academics/chem/courses]

FOUNDATION COURSES REQUIRED OF ALL MAJORS:
* General Chemistry I (C1403)
  Midd CHEM 103 - General Chemistry I

REQUIRED MAJOR SPECIFIC COURSES

* General Chemistry II (C1404)
* General Chemistry Lab (C1500)
  Midd CHEM 104 - General Chemistry II
  or: CHEM 107 - Advanced General Chemistry

* Organic Chemistry I (C3443)
* Organic Chemistry Lab (C3543)
  Midd CHEM 241 - Organic Chemistry I

COMPUTER SCIENCE
[Midd course listings at http://www.middlebury.edu/academics/cs/courses]

FOUNDATION COURSES REQUIRED OF ALL MAJORS:
* Introduction to computer science and programming in C++, JAVA, or MATLAB (W1003, W1004, W1005, W1007 or W1009)
  Midd CSCI 150 - Computing for the Sciences (covers Python and some MATLAB)
  or: Midd CSCI 101/150/190 AND CSCI 201 - Data Structures (in Java)

REQUIRED MAJOR SPECIFIC COURSES

* Introduction to Computer Science and Programming in MATLAB (COMS W1005) preferred
  Midd CSCI 150 - Computing for the Sciences

* Data Structures and Algorithms (COMS W3137)
  Midd CSCI 201 - Data Structures

* Discrete Mathematics (COMS W3203)
  Midd CSCI 200 - Mathematical Foundations of Computing

* Scientific Computation (COMS W3210)
  Midd: not offered

COMPUTER SCIENCE (choose one set of courses below)
* Computer Programming in JAVA (W1007)
* Data Structures in JAVA (W3134)
The Department strongly recommends JAVA over C.

Midd CSCI 150 (preferred) or CSCI 101
Midd CSCI 201 - Data Structures (in Java)

**BIOLOGY**
[Midd course listings at http://www.middlebury.edu/academics/bio/courses ]

* Environmental Biology: Molecules to Cells (EEEB W2001)
  Midd BIOL 145 - Cell Biology and Genetics

* Introduction to Molecular and Cellular Biology (BIOL C2005)
  Midd BIOL 145 - Cell Biology and Genetics

**ECONOMICS**
[Midd course listings at http://www.middlebury.edu/academics/econ/courses ]

* Principles of Economics (ECON W1105)
  Midd ECON 150 - Intro Macroeconomics  OR
  Midd ECON 155 - Intro Microeconomics

* Introduction to Accounting and Finance (E2261 / ACCT 001)
  Midd ECON 316 - Corporate Finance

**EARTH AND ENVIRONMENTAL SCIENCES**
[Midd course listings at http://www.middlebury.edu/academics/geol/courses ]

(choose one course listed below)
* Advanced General Geology (EESC W4001) [may be taken while at Columbia.]
* The Climate System (EESC V2100 ) [may be taken while at Columbia.]
* The Solid Earth System (EESC V2200) [may be taken while at Columbia.]

One of:
Midd GEOL 112 - Environmental Geology
Midd GEOL 170 - The Dynamic Earth
Midd GEOL 221 - Geology of Climate Change

**EARTH AND ENVIRONMENTAL ENGINEERING**
* Alternative Energy Resources (EAEE E2002) [may be taken at Columbia]
  Midd: not offered

**ELECTRICAL ENGINEERING**
* Introduction to Electrical Engineering (ELEN E1201) [may be taken the summer before entering or while at Columbia]
  Midd: not offered

**ENGINEERING MECHANICS**
* Mechanics (ENME E3105) [may be taken the summer before entering or while at Columbia]
Midd: not offered

**WRITING**
* English Composition (ENGL C1010 University Writing).
Midd: covered by the college writing course (CW) requirement