

***Sequence of Courses for **MATH** Majors Leading to a
B.S. in Mathematics from Fordham University
and a
B.S. Degree in Engineering from either Columbia University
or Case Western Reserve University***

Fall

Freshman

Spring

Calculus 1: MATH 1206
Computer Science I: CISC 1600
Computer Science I Lab: CISC 1610
 Social Science: ECON 1100 or 1200
 Composition and Rhetoric: ENGL1102
 Philosophy of Human Nature: PHYS1000

Calculus 2: MATH 1207
Computer Science II: CISC 2000
Computer Science II Lab: CISC 2010
Mathematical Modeling: MATH 1700
 Faith and Critical Reason
 Understanding Historical Change

Sophomore

Multivariable Calculus I: MATH 2004
Discrete Mathematics: MATH 2001
Physics I: PHYS 1701
Physics I Lab: PHYS 1511
 Philosophical Ethics
 Texts and Contexts (EP2)

Multivariable Calculus II: MATH 2005
Linear Algebra I: MATH 2006
Differential Equations: MATH 3002
Physics II: PHYS 1702
Physics II Lab: PHYS 1512
 Sacred Texts and Traditions

Junior

Abstract Algebra: MATH 3005
Probability: MATH 3006
General Chemistry I Recitation: CHEM1311
General Chemistry I: CHEM 1321
General Chemistry Lab I: CHEM 1331
 Advanced Disciplinary Course
 Fine Arts

Numerical Analysis: MATH 4006
Statistics: MATH 3007
Scientific Communication: MATH 3010 (EP3)
 Adv. Disc. Course or Values Seminar (EP4)
 Engineering Elective

Students applying to Case Western should use the Engineering Elective to take CHEM 1322.

Students applying to Columbia in Engineering Mechanics may use the Engineering Elective as a general elective. For Applied Mathematics, Electrical Engineering and Mechanical Engineering, take PHYS 2005, Modern Physics. For Civil Engineering, take PHYS 2101. For Computer Engineering take CISC 3400, JAVA

Programming. Students in fields of Operations Research must use AP credits or summer courses to take CISC 2200 Data Structures. Fields of Engineering other than those listed here will likely require a number of summer courses.

(revised: March 19, 2020)