## **Computer Science - Mathematics**

The goal of this interdepartmental major is to provide substantial background in each of these two disciplines, focusing on some of the parts of each which are closest to the other. Students intending to pursue a PhD program in either discipline are urged to take additional courses, in consultation with their advisors.

The program requires a total of at least 46 points: 20 points in Computer Science, 21 points in Mathematics, and two 3-point electives in either CS or Maths.

## **Computer Science:**

COMS W1007 Object-Oriented Programming and Design in Java COMS W3137 Data Structures and Algorithms COMS W3157 Advanced Programming COMS W3203 Discrete Maths COMS W3261 Computer Science Theory CSEE W3827 Fundamentals of Computer Systems

## **Mathematics:**

One of the following sequences:

1) MATH V1101, MATH V1102, MATH V1201, and MATH V1202 2) MATH V1207, MATH V1208

Each of the following:

MATH V2010 (unless MATH V1207 and MATH V1208 are taken) MATH W4041 MATH V3951 or MATH V3952

## **Electives:**

Two of the following:

CSOR W4231 Analysis of Algorithms COMS W4241 Numerical Algorithms and Complexity MATH V3020 MATH BC2006 MATH W4061 MATH V2500 MATH V3007 MATH V3386 MATH W4051