

Counseling

Applied MS Math students will receive course counseling from the MS Chair. The Graduate Program Coordinator will process departmental and Rackham paperwork. Information about minimum credits, cross-listed courses, and other matters can be found in [this Course Enrollment section](#) of the Graduate Student Handbook. Students interested in a dual degree are advised to consult Rackham's policies for dual degree programs and double counting of credit hours.

These requirements are in force from 06-14-2021. All earlier discussions with the counselor will continue to be accepted.

Requirements

There are two options in this program. One option is a program concentrating in classical applied mathematics, differential equations, and/or numerical analysis and scientific computing; the second focuses on the mathematics of optimization, or on stochastic processes. Each option has a minimum requirement of twenty-four credit hours of coursework that includes two cognate courses. In addition, a program under the first option must satisfy conditions 1, 2 and 3, and a program under the second option must satisfy conditions, 1, 2* and 3.

1. The program must include Math 420 and 452 or substitutes approved by the counselor. The following classes are generally approved as substitutes for Math 420: Math 481, 565, 566, 582, 593, 594. The following classes are generally approved as substitutes for Math 452: Math 525, 526, 551, 555, 575, 596, 597. The program must also include one course at the 500 level not in analysis (including probability) or classical applied mathematics such as Math 565, 566, 567, 575, 582, 590, 591, 592, 593, or 594, or a more advanced course approved by the counselor.

2. The program must include five courses from Group A below. At least one of these five courses must be chosen from Group B. This part of the program can include at most two classes at the 400 level and must include at least two classes at the 500 level.

A: Math 420, 452, 481 or 582, 525, 526, 551, 555, 556, 557, 558, 565 or 566, 571, 572, 590 or 591 or 592, 593 or 594, 596, 597, 651, 652, 654, 655, 656, 658, 663, 671, 756, or other counselor approved courses.

B: Math 651, 654, 655, 656, 658, 671, 756.

2*. The program must include five courses from Group A* below. At least one of these courses must be chosen from Group B*. This part of the program can include at most two classes at the 400 level and must include at least two classes at the 500 level.

A*: Math 420, 452, 481 or 582, 525, 526, 551, 555, 561, 562, 565 or 566, 571, 572, 590 or 591 or 592, 593 or 594, 596, 597, 625, 626, 663, 773, or other counselor approved courses, possibly including at most two statistics courses at or above the 500 level.

B*: Math 596, 597, 625, 626, 663, 773.

3. Two cognate courses at the graduate level must be included in the program. These may be elected from other special areas of mathematics or from other fields. The courses chosen must be related to the student's mathematics program.