Students must complete 30 credits of coursework in one of the three areas of concentration. All three concentrations offer both thesis and non-thesis options.

Students choose from one of the following concentrations:

**APPLIED MATHEMATICS**

*Thesis option* requires 24 credits of coursework including 12 credits at the 600-800 level, 12 credits in courses with primarily math content, three credits in Numerical Analysis, one credit of Applied Math or appropriate seminar, and six credits in an application area. Students are also required to complete six credits of AMSC799.

*Non-thesis option* requires 30 credits of coursework including 18 credits at the 600-800 level, 15 credits with primarily math content, three credits in Numerical Analysis, six credits in an application area, and one credit of Applied Math or appropriate seminar. Students are also required to submit a scholarly paper, and pass the master's level Qualifying Exam Requirement.

**Applied Statistics**

*Thesis option* requires 24 credits of coursework including 18 credits of statistics core courses, six credits in an application area, and one credit of seminar. Students are also required to complete six credits of AMSC799.

*Non-thesis option* requires 30 credits of coursework including 18 credits of statistics core courses, six credits in an application area, six credits of electives, two credits of seminar, and one credit of AMSC762. Students are also required to pass three qualifying exams, and submit a scholarly paper.

**Scientific Computation**

*Thesis option* requires 24 credits of coursework including nine credits of scientific computing core courses, six credits of core science courses, and three credits of scientific computing application courses. Students must also complete six credits of AMSC799.

*Non-thesis option* requires 30 credits of coursework including 15 credits of scientific computing core courses, six credits of core science courses, three credits of scientific computing application courses, and six credits of electives. Students must also submit a scholarly paper.