

## Mathematics M.S.

2016-2017

### Mathematics Core Requirements (18 hours)

[MATH 5131](#) Abstract Algebra

[MATH 5132](#) Real Analysis

[MATH 5136](#) Ordinary Differential Equations and Dynamical Systems

[MATH 5137](#) Topology and Geometry

Or

[MATH 5333](#) Numerical Analysis

### Students will select an additional two courses from the following (courses not already satisfying the requirements above):

[MATH 5133](#) Complex Analysis

[MATH 5134](#) Logic

[MATH 5137](#) Topology and Geometry

[MATH 5231](#) Linear Algebra

[MATH 5330](#) Mathematical Software and Modeling Simulation

[MATH 5333](#) Numerical Analysis

[MATH 5431](#) Mathematical Modeling in The Applied Sciences

[STAT 5431](#) Theory and Application of Probability

### Mathematics Thesis Option (15 hours)

3 hours of MATH/STAT courses 5000-6000 level

6 hours of MATH electives 4000-6000 level

[MATH 6939](#) Master's Thesis Research

### Mathematics Extended Course Work Option (15 hours)

3 hours of MATH/STAT courses 5000-6000 level

6 hours of MATH electives 4000-6000 level

[MATH 6837](#) Research Project I

[MATH 6838](#) Research Project II

With advisers approval, two of the following may count towards the Master's Degree as a 4000-level elective, if taken as a graduate student at UHCL:

[MATH 4341](#) Introduction to Analysis

[MATH 4322](#) Introduction to Abstract Algebra

[MATH 4313](#) Introduction to Topology