

# Department of Mathematics and Statistics (DMS) Departmental Honors Program

Proposed program start: Fall 2022

## Why/Mission?

To enrich and reward student engagement with mathematics and enhance their profiles for scholarship, math careers, and graduate studies.

## How to Join

- Incoming mathematics and statistics majors may apply to join the DMS honors program if they have an overall 3.0 high school GPA, or a recommendation letter from their mathematics teacher. Current mathematics and statistics majors with a 3.0 GPA may apply to join the DMS honors program by providing a recommendation letter from a current or past mathematics and statistics instructor.

## Requirements

To graduate with “Departmental Honors”, students must satisfy each of the following requirements (unless waived by the departmental Student Affairs Committee):

- **Have a 3.5 cumulative GPA at graduation.** This requirement cannot be waived.
- Have a 3.5 GPA in the Math/Stats major courses.
- Complete at least 9 honors designated course credit hours from eligible MA/ST courses. Out of the 9 credit hours, at least 6 must be 300+ level courses. At least 3 hours must be fulfilled by taking MA/ST 499. MA/ST 499 may be taken a second time.
- Attend MA/ST seminars and colloquia suitable for undergraduate students.
- **Successfully defend an undergraduate honors thesis project.** This cannot be waived.

## Honors Designated Courses

The honors designated courses will play an integral part of the work required for a student to graduate from the DMS Honors program. The work done within honors designated courses can take the form of a project (for example, solve a particular case of a problem, write up the code for a specific mathematical/statistics research question, use existing code to produce data

bases of useful mathematical/statistical items, etc.) or extra work which explores, in more depth, the topics taught in the specific class. The student should agree with the course instructor on a content proposal, which should include a scope of work to be completed, and be submitted for approval by the departmental Student Affairs Committee. The deadline to submit the content proposal to the Students Affairs Committee is 5pm the Friday of the third week of classes.

## Honors Thesis Project

To begin an honors thesis project, the student must complete a proposal form that indicates at least three faculty members of the University who will serve on the thesis project committee. At least two of those members, including the chair, must be DMS Faculty. The thesis project may begin once this form is signed by all committee members and the departmental Student Affairs chair.

Generally, the format of the thesis project will follow the guidelines set by the Graduate School for a Master's thesis. An honors thesis should include creative research by the student, but not necessarily novel results. An honors thesis project may be

- a survey of known math/stat results or,
- a research project in collaboration with a faculty member outside the math/stat dept that includes sufficient mathematical/statistical content.

The thesis project must be accepted by the full thesis project committee and a representative of the Honors College following an oral defense. Enrollment in MA/ST 499 is required for completing the thesis project

## Undergraduate Seminar/Colloquia

The department offers regular seminars and colloquia throughout the academic year. Some of these are suited for an undergraduate audience. During these presentations students are exposed to possible research topics and techniques.