

Undergraduate Program

Start here

This page is for current and incoming Binghamton students who need the practical details of the Mathematics & Statistics majors and minor: forms, policies, and course-planning tools. For an overview of the program and tracks, see [Overview of the Major Tracks](#) and the University's Undergraduate Programs in Mathematical Sciences page.

If you are:

- **Thinking about declaring, dropping, or changing a major or minor in Math/Statistics.**

Go to Section 3, **“Declare, Drop, and Change Major/Minor”**, which includes the Google form and instructions.

- **Already a Math/Statistics major or minor and planning your courses.**

Go to Section 5, **“Course Selection and Registration”**, where you'll find the prerequisite infographic, unofficial course schedules, and links to past syllabi.

- **A prospective student or still exploring whether to study Math/Statistics at Binghamton.**

Go to Section 12, **“For Prospective Students”**.

Need non-department help? See Harpur Advising (general advising) and Registrar (records/transcripts).

1. Degree Options

The Department of Mathematics and Statistics has the following **seven degree options**: three BA major tracks, three BS major tracks, and one minor, covering a wide range of topics in mathematics and statistics.

- **Bachelor of Arts in Mathematical Sciences** with
 - a track in **Mathematics**,
 - a track in **Data Science and Statistics (DSS)**, and
 - a track in **Actuarial Science**.
- **Bachelor of Science in Mathematical Sciences** with
 - a track in **Mathematics**, and
 - a track in **Data Science and Statistics (DSS)**, and
 - a track in **Actuarial Science**.
- **Minor in Mathematics**.



BA vs. BS in Mathematics

- **BA in Mathematics:** Broad exposure to mathematics and statistics with an emphasis on practical applications. Requires fewer math courses, giving you flexibility to explore other fields (e.g., languages, arts, natural and social sciences). It's often the most efficient path to a double major or dual degree.
- **BS in Mathematics:** More demanding, with additional upper-level and proof-oriented coursework. Designed for students aiming at graduate study in mathematics, statistics, or related fields. Our BS also includes an actuarial track for those who want more preparation toward actuarial exams.
- **Both degrees:** Require the same total number of credits; the BS simply includes more math courses. The BA is not an inferior degree—it's a different pathway aligned with different goals. Choose the option that best fits your interests and plans after graduation.

To know more details about the three different tracks and their future career paths, [here is the overview information.](#)

2. Degree Requirements

Read the Academic Guide (BA, BS, and Minor) for a very comprehensive and detailed official description of the program requirements for each of the seven degree options. In addition to the major/minor requirements, the Harpur College requirements can be found on this webpage. Please be careful about the [Grade Requirements](#) for the degree and prerequisite of registering courses.

3. Declare, Drop, and Change Major/Minor

Any student wishing to declare a major in the Department of Mathematics and Statistics needs to be admitted to Harpur College of Arts and Sciences first; otherwise, the declaration can not be processed.

To **declare** or **drop** a major or minor, fill in this Google Form. We now require each student declaring the BS major to meet with a faculty member before making the major declaration. Please write down the name of the faculty member whom you have talked with. The math office will not process BS major declarations until this step is completed. If you have not met with a faculty member yet but need to declare a major now, please consider declaring a BA major first (and switching to BS later if desired). Enter the faculty's name in the blank next to "Other" below.

To **change** from one major to another, simply drop the old major, then declare the new one.

Note that a student can only earn one major at maximum from the same department. Hence, no one can double major in mathematics and actuarial science, or obtain a BA degree in Statistics and a BS degree in Mathematics, etc. However, students are encouraged to explore double major options from a different department.

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4. Forms for Undergraduates

- Major/Minor Declaration, Drop and Change form
- Math 225, Math 227, second half-semester signup form: Use this form if you want to register 225 or 227 in the second half-semester without the 224 or 226 co-requisite, while the stand-alone section of 225 or 227 does not work for your schedule.
- Undergraduate Independent Study (Math 497) Form
- Prerequisite Exception Request Form
- Request form for an Undergraduate Taking a Graduate Course
- Basics about Course Transfer: Information about Transferring Math credits (including link to required Harpur College Transfer Credit Petition form)

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5. Course Selection and Registration

To plan coursework effectively, students should consider both **prerequisite** dependencies between courses and the **semester** in which a course is offered. Prerequisites are particularly important in our department, and some courses are only available in certain semesters. Failing to account for these details could result in a student being unable to take required courses and potentially delaying graduation. In exceptional cases when prerequisite courses are in progress in the current semester without knowing grades, students may request a temporary waiver

of prerequisites during the advance registration period using the Prerequisite Exception Request Form. However, proof of passing the prerequisite course is required at the start of the semester to remain enrolled in the class.

- [Infographics demonstrating the prerequisite dependencies between courses and semester.](#)
- Unofficial course schedules of the Department of Mathematics and Statistics.
- Official course descriptions in the catalog of the university: select the term and then choose MATH as the subject. A Binghamton user ID and password is required.
- Past course syllabi by semesters
- **In-person final exams for Summer/Winter online math courses.** Some Winter/Summer online math courses require an on-campus, in-person final exam at Binghamton. A very limited off-campus, in-person proctoring exception may be approved in advance by the Department. No remote/virtual proctoring. Details and exception request form.

6. Information Regarding Calculus

- [The Calculus Overview](#)
- [Calculus placement test](#)
- [Math 227 place-out exam](#)
- [How to register for calculus classes](#)
- [Help room schedules](#)

More details about some important Calculus courses

- [Introduction to Calculus \(Math 223\)](#)
- [Calculus I \(Math 224/225\)](#)
- [Calculus II \(Math 226/227\)](#)
- [Calculus III \(Math 323\)](#)
- [Calculus for Business and Management \(Math 220\)](#)

7. Credit Transfer and Exam Credit

This section covers (i) credit earned by exams (AP/IB/CLEP) and (ii) transferring courses from other institutions.

A. Exam credit (AP / IB / CLEP)

Binghamton's policies and equivalencies are maintained by Harpur Advising:

- Harpur College Transfer Credit Policies
- Advanced Placement (AP) equivalencies
- International Baccalaureate (IB)
- CLEP exam credit

B. Transfer credit from another institution (including summer/winter elsewhere)

Step 1 — Check if it is already pre-approved.

- Use the Pre-approved Transfer Table (select the institution, then the course).
- If your course appears there with the correct BU equivalent, you typically do not need a separate petition.

Step 2 — If it is not pre-approved, request Math/Stats pre-approval before registering. Not all courses are transferable to Math/Stats requirements, so please have coverage reviewed in advance.

- Fill out the Harpur Transfer Credit Petition form.

Save it as an **editable PDF** (not a photo/screenshot).

- Email the completed petition to the **Director of Undergraduate Studies (DUS) Prof. Vladislav Kargin** (vkargin@binghamton.edu) for review and include in your email:
 - the **current syllabus** (required)
 - a link to the **course catalog/department page**
 - **when** you plan to take the course (term + dates if known)

C. Common constraints (important)

- **Online courses:** asynchronous courses are generally not approved for transfer.
- **Non-US institutions:** transfer credit is typically not approved, with exceptions for approved programs (for example, certain study-abroad arrangements).

See [this page](#) for additional rationale and guidance.

8. Accelerated (4+1) Programs

Binghamton's 4+1 programs let qualified students earn a bachelor's + master's degree in about five years. See Combined Degree Programs (4+1) for general eligibility and policies.

Math-related options include:

- BA/BS Mathematical Sciences → MS in Data Science and Statistics (DSS)
- Harpur/MBA 4+1 program

- BA Mathematical Sciences → MAT Mathematics (Adolescent Education)

9. Faculty Advisors

You can get advising in several ways, depending on the question:

- **Faculty advisor (assigned when you declare the major).**

- Every major is assigned a faculty advisor at the time of declaration.
- Meet with your advisor to plan courses, choose electives, and discuss goals (graduate school, careers, etc.).
- You may switch to another faculty advisor later, after you get to know the faculty.

- **Advising Liaison (especially for pre-majors / lower-division).**

- **David Biddle** (biddle@math.binghamton.edu) is the department's Coordinator of Undergraduate Advising.
- He is the primary contact for students exploring the major (not yet declared) and for majors still completing mostly lower-level coursework.

- **Director of Undergraduate Studies (DUS) — policies and exceptions.**

- The DUS handles department decisions such as transfer-course approvals, prerequisite exceptions, and DegreeWorks exceptions.
- Current DUS: **Prof. Vladislav Kargin** (vkargin@binghamton.edu).

10. Honors, Awards and Scholarships

We recognize students through **graduation with departmental honors** and several **annual awards/scholarships**.

- **Award descriptions & criteria (stable):** Honors, awards and scholarships (university page)
- **Recent recipients (updated annually):** [Award recipients by year](#)
- **Pi Mu Epsilon (local chapter):** Pi Mu Epsilon at Binghamton (see also national site)

11. Student Organizations and Activities

The students in the Department of Mathematics and Statistics frequently participate in the following organizations and in a wide range of activities.

- The Undergraduate Math Club and MAA student chapter
- The Association for Women in Mathematics Student Chapter

- The Data Science and Analytics Club
- The Actuarial Association
- The Binghamton chapter of Pi Mu Epsilon, the National Mathematics Honor Society.
- The department is a participant in the Seaway Section of the MAA.

12. For Prospective Students

If you are new to the Math major/minor, please spend a few minutes to read answers to some Frequently Asked Questions.

If you are a prospective student who is interested in visiting the department and talking with our faculty members, you can make an appointment with the department secretary.

From:

<https://www2.math.binghamton.edu/> - **Department of Mathematics and Statistics, Binghamton University**



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