



HIGHLIGHTS

- Dive into original research as early as your first year.
- Study with internationally known researchers who are also dedicated teachers.
- Compete in prestigious mathematics competitions. Use ClarkTechApply to explore opportunities.
- Continue studying math abroad at the London School of Economics.

Introduction to the Major

Studying mathematics creates a deep understanding of the patterns and processes in the world around us - and gives us tools to make the world better.

If you love mathematics and want to understand how mathematical research underpins discoveries that can make a difference in the world - modeling disease outbreak, quantum mechanics phenomena, and general relativity, developing new data science algorithms, analyzing economic data or predicting climate patterns - then you are in the right place. We are a community of scholars who love math, and we also know why it matters to us. Cultivate a mathematics mindset and skill set to unlock the patterns in the world around us and learn the language of the universe.

CORE COURSES

We will help you chart a path based on your interests and level of preparation. Areas of focus include pure mathematics, actuarial science, teacher preparation, and applied mathematics such as mathematical modeling or statistics. A total of 10 courses plus honors calculus and a senior capstone are needed to complete the major, including:

- Four core courses in algebra, multivariate calculus, and modern analysis
- Six electives, at least four at the 200 level
- Two semesters of honors calculus
- Senior capstone (courses, honors thesis, research experience, internship, or community service)

"Math is like an art to me. Seeing formulas, theorems, equations, and proofs, and learning how they can be used practically fascinates me. A lot of professors at Clark share that sentiment."

— MICHAEL GAIEWSKI '18



MATHEMATICS Bachelor of Arts



DESIGN
YOUR
JOURNEY




Explore
and navigate
Clark curriculum


Connect
and engage
with communities


Discover
and pursue
your passions


Develop
professional
skills


Reflect,
design
and plan

YEAR **1**

YEAR **2**



☐ Explore the department

Learn about different areas of focus in mathematics by talking with department faculty and staff as well as your peers.



☐ Identify potential Program of Liberal Studies (PLS) courses

How can these courses support your interests and educational goals.



☐ Learn about campus resources

Make ClarkYou your default homepage and explore student resources related to academics, campus life, and health and wellness.



☐ Get Connected

Attend campus talks and events, including those hosted by the Clark Center for Technology, Innovation, and Entrepreneurship (TIE). Join ClarkCONNECT to meet alumni and learn about their career paths. Log into Handshake to find career exploration events. Consider joining the DAIM (Diversity and Inclusion in Mathematics) Club.



☐ Consider a research project

Meet with faculty members to learn about research opportunities, or design your own project.



☐ Explore off campus and get involved

Participate in the national Putnam Competition and meet math majors from other universities. Check out activities and opportunities in the community beyond Clark through the office of Community Engagement and Volunteering.



☐ Reflect on what sparks your interest

What new interests have you discovered? What else do you want to explore? Celebrate your progress!



☐ Dig in and define your interests

Consider whether you want to focus on pure or applied mathematics. Identify faculty members who share your interests and ask one to become your adviser.



☐ Declare your major

Talk with faculty and advisers about whether a second major such as computer science, data science, economics, or physics, or a complementary minor such as actuarial science and financial mathematics, would align with your interests and goals.



☐ Look into study abroad

The London School of Economics is a popular choice. Visit the office of study abroad to learn more about opportunities and how to make it happen.



☐ Cultivate your network

Attend a career fair during fall or spring to discover new organizations and the types of roles they are hiring for. Reach out to the Career Connections Center (CCC) to learn about the resources available to you.



☐ Craft your professional resume

Visit the Career Lab in ASEC for help. Upload your resume to Handshake for review and feedback.



☐ Build your resume

Join the Clark club that matches your interests and apply for an e-board position to build your skills. Learn how to demonstrate personal qualities such as leadership, teamwork, problem-solving, and initiative. Get your resume reviewed through the Career Lab.



☐ Pursue another point of view

Consider courses in other STEM fields and get to know your STEM classmates.

WHAT CAN I DO WITH MY MAJOR?

JOBS & EMPLOYERS

Graduate work for a variety of public and private sector employers as statisticians, data scientists, finance and business analysts, computer scientists, teachers at all levels and more.

GRADUATE PROGRAMS

Alumni have gone on to graduate school in Pure and Applied Mathematics, statistics, finance, industrial engineering, computer science, and more at top schools like Brown, Cornell and NYU.

YEAR 3



☐ Identify your path

This is where the major divides into pure and applied mathematics, and dives deeper into different fields of study.



☐ Engage and refresh your networks on and off campus

Continue using ClarkCONNECT to meet alumni who study or work in fields that interest you and learn about what they do and how they got there. Join the CCC Alumni Job Shadow Program to learn about a day on the job.



☐ Use your resources

Make use of ClarkTechApply, a web application founded by a Clark alum, to explore internship opportunities that align with your interests and goals.



☐ Get ready for next year

Recognize the progress you have made! Plan for your capstone or honors thesis. Meet with your adviser and the CCC to talk about your plans for senior year and beyond.



☐ Share your knowledge and give back

Work as a Peer Learning Assistant (PLA). Lead a discussion section for an introductory course.



☐ No regrets

What's on your Clark bucket list? What are the skills you hope to develop before graduation and the experiences you want to have?

YEAR 4



☐ Pull it all together with your capstone

Fulfill the capstone requirement through an honors thesis, an interdisciplinary project or a directed study, or select advanced mathematics courses. Be sure to complete all your PLS courses and other remaining requirements.



☐ Prepare to launch

Update your professional documents and LinkedIn Profile. Identify faculty who know you well and will serve as references or will write letters of recommendation. Schedule a mock interview through the Career Connections Center for feedback.



☐ Go beyond the classroom

Join the American Mathematical Society or other professional organizations/ Attend talks and lectures off campus. Participate in the Putnam Competition.



☐ Show your work

Present research that you completed over the summer or during the academic year at ClarkFEST in the spring or fall. Attend or present at a research conference. What other experiences can you leverage to pursue your goals?



☐ You did it!

What have you learned that you value? How will you embrace this learning in your life beyond Clark? Celebrate your accomplishments?



AMPLIFY YOUR MAJOR!

At Clark, your mathematics education extends beyond the classroom.

Participate in mathematics competitions (including the Putnam Competition) individually or as part of a Clark team. Join with peers and faculty advisers to prepare for competitions, the Graduate Record Examinations (GRE), or actuarial science examinations. Give back by tutoring math with students in Worcester Public Schools. Many students take advantage of internship opportunities during the academic year or over the summer to connect what they are learning with their professional development.

CONNECT WITH US!

Bio-Physics (BP) Building, Room 327

508-793-7343

mathcs@clarku.edu

Advising

We are here to support your academic and personal journey.

In your first year at Clark, you will be assigned an adviser to help you select your courses and program. Once you declare your major, mathematics faculty will advise you.

CLARK
UNIVERSITY



Challenge Convention.
Change Our World.

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