

MATHEMATICS

BACHELOR OF SCIENCE (B.S.) BACHELOR OF SCIENCE IN EDUCATION (B.S.ED.)

EST. 1883



### CAREER OPPORTUNITES

Many of our graduates go on to teach Mathematics at the high school or middle school level, but that is not the only option! Math majors are in demand with employers from a variety of sectors:

- » Banking & Finance
- » Insurance Industry
- » Technology

Studying math is also great preparation for law school. Math majors learn to think critically and construct valid logical arguments, just like what is needed to practice law.

# **LIKE SOLVING PUZZLES AND LOGICAL THINKING? CONSIDER A DEGREE IN MATH**

Math majors at BHSU take classes in statistics and computer programming. These are critical areas which are only becoming more important each year. Another great course is Financial Mathematics, a popular elective in which students learn about investments such as stocks, bonds, and options, from a mathematical point of view. This course also helps prepare students for the first actuarial exam, a huge advantage in internship opportunities, etc. Finally, courses in discrete mathematics and combinatorics will focus on writing correct proofs...but also on solving fun puzzles, like:

- » In a certain town, can I walk across every bridge exactly once, and end up back where I started? (Königsberg Bridge Problem)
- » How many different ways can eight rooks be placed on an 8 by 8 chessboard so that no two are attacking each other?
- ENJOY SMALL CLASSES with knowledgeable, engaged faculty to better facilitate learning
- RESEARCH OPPORTUNITIES are available in pure mathematics and mathematics education



### THE ANNUAL TEACHERS FAIR

Open to all teaching majors each spring semester, BHSU holds its annual teachers fair welcoming over 60 employers to campus to meet with students seeking job opportunities.







### **GET INVOLVED ON CAMPUS**

Students are able to get involved in a variety of ways on campus.

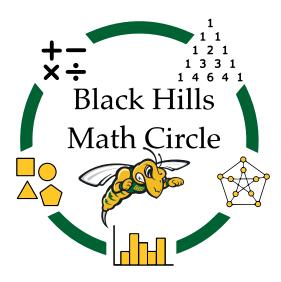
 There is an opportunity for paid work on campus as a MATH MENTOR, helping other students learn math as a tutor at the Math Assistance Center and/or working with a professor in their classroom. This is great experience for anyone who's considering teaching math (and also a great way for math majors to improve their own math skills and understanding).

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The benefits from mentoring are numerous and have proved to be helpful in my current career as a teacher. Mentoring was my first chance to truly help students with what they needed. Assisting the professors and getting an insight to how they prepare for a class is something I encourage for anyone looking into a teaching career.

Jaelani Uthe, Class of 2018

 Each spring, THE MATH CLUB travels to the meeting of the Mathematical Association of America for our region, usually somewhere in Colorado. This is a great way to meet other math students and faculty in the Rocky Mountain region, and to see new and interesting research in math. Many of our students have also presented their own research at this meeting—our faculty love to work with undergraduates on research, and there's no shortage of interesting problems!



 Assist with the BLACK HILLS MATH CIRCLE, a mathematics enrichment activity for area high school students. These students visit the BHSU campus on Saturday mornings and explore topics such as the geometry of gerrymandering, the combinatorics of the card game SET, or introductory computer programming on TI calculators through interactive activities presented by BHSU faculty, students, and area educators.



## A FEW WORDS FROM ALUMNI

#### EMMA THOMAS

Emma Thomas, graduate from 2017, says, "The professors are great. They are more than willing to help you and work with you. They are fun and help broaden your knowledge, like through the attendance of the annual math conference and such. Also, it really helps to build a tight knit community that is more than willing to help each other out when it comes to those tricky homework problems and studying for those stressful tests!"

#### **ANYA PERKINS**

ANTA PENNI

Anya Perkins, graduate from 2016, explains, "The math club encourages everyone to attend the math conference, a fun learning experience that sets you up for what math is like in the real world, the careers you can have, and the math lectures that broaden your mathematical brain just that much more. Also, the math center is the place to be when you feel as though a particular math problem is about to make your mind explode. When you are frustrated or confused, go there. The tutors are so friendly, personable, and understanding.

The professors make math exciting and they encourage you to answer your own question with guided steps along the way which in my opinion is the best way to learn mathematics."

