MATHMATICS

Actuarial science major • Applied mathematics major • Engineering major • Pure mathematics major • Quantitative analysis major • Mathematics minor • Quantitative methods minor

Top careers in business as defined by U.S. News & World Report are in the field of mathematics. As you prepare for a thriving career in one of the most applicable disciplines in the modern workforce, learning not just core mathematics skills but critical thinking and complex problem solving, do so while supported by professors who are setting the national standard for mathematics education.

THE CLASSROOM EXPERIENCE
Combining mathematics education with real-world experiences

The Franklin College mathematics curriculum is academically rigorous, holistic and highly practical, integrating a mix of core mathematics education with soft skills training like collaboration, communication, presenting and problem solving. All that learning is underpinned by an immersive approach that introduces real-world technology early on, preparing students to work with tools used in the field today.

The department offers four areas of study, allowing students to specialize in preparation for a specific career field. Major options include:

- **Pure mathematics**: Provides a broad, flexible skill set relevant in data analysis, strategic planning and any field that involves mathematical and statistical problem solving
- **Applied mathematics**: Focuses on the relationship between mathematics and adjacent scientific disciplines including computer science, chemistry and physics
Mathematics majors apply their skills in practical settings via courses that task students with completing undergraduate research for a client, empowering them to solve real-world problems while gaining applicable experience in statistical consulting and analysis of big data mentored by alumni coaches.

- **Actuarial science**: Focuses on the role of mathematics, statistics and business skills in risk management, specifically in financial and insurance settings
- **Quantitative analysis**: Explores the relationships between math and business disciplines including marketing, finance and economics

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**OUTSIDE THE CLASSROOM**

**Internships and undergraduate research**

Every Franklin College mathematics major completes at least one internship; often times those internships lead to full-time employment upon graduation. Past mathematics majors have interned with:

- Cummins
- Salesforce
- Caterpillar
- The Hagerman Group
- Federal Bureau of Investigation
- Lincoln Financial
- Quality Mill Supply
- OneAmerica
- Roche

Mathematics majors also frequently pursue independent studies and independent research, self-assigning and completing analyses like whether lane assignments impact international swimming events and how freshman math placement pertains to a student’s long-term academic success. These projects equip students with experiences and tangible outcomes to demonstrate in interviews, propelling them forward during the job searching process.

**POST-GRADUATION**

**Excellent track record of graduate school or job placement**

More than 95 percent of mathematics majors since 2010 have secured full-time employment or have been accepted to graduate school within six months of graduation. While most mathematics majors go directly into the industry, equipped with a well-honed and applicable skill set, many students choose to pursue advanced degrees in statistics, economics, mathematics, analytics or law. Graduates who go directly into the field have secured jobs working as data scientists, business analysts, actuaries and mathematicians.

**DEPARTMENT OVERVIEW**

- **Nationally recognized program**: Franklin College’s innovative math program was selected by the American Mathematical Society as the recipient of the 2019 Award for an Exemplary Program or Achievement in a Mathematics Department. Franklin College is the first college or university in Indiana, and only the 14th college or university in the country, to be honored with this award.
- **3+2 engineering program**: Franklin College offers a unique dual-degree program in partnership with the Purdue School of Engineering and Technology at IUPUI. Accepted students can receive two undergraduate degrees in five years – a bachelor of arts degree from Franklin College in applied mathematics and a bachelor of science degree from Purdue School of Engineering and Technology at IUPUI in either computer, electrical or mechanical engineering.
- **Department contact information**: Visit [www.FranklinCollege.edu/mathematics](http://www.FranklinCollege.edu/mathematics) or contact John Boardman, Ph.D., professor of mathematics, at 317.738.8768 or jboardman@FranklinCollege.edu.