

A CLOSER LOOK

BS Mathematics



THE UNIVERSITY OF ARIZONA
UA South

Mathematics

The Bachelor of Science in Mathematics with a Computer Science Emphasis is a degree that prepares students for careers in many industries including business management, manufacturing, aerospace, communications, pharmaceutical and other industries. Students will develop necessary and transferable skills that include critical thinking, problem diagnosis, problem solving, computer skills and quantitative skills. These skills assist students when preparing for graduate programs or entering the job market. The Mathematics program is offered in Sierra Vista.

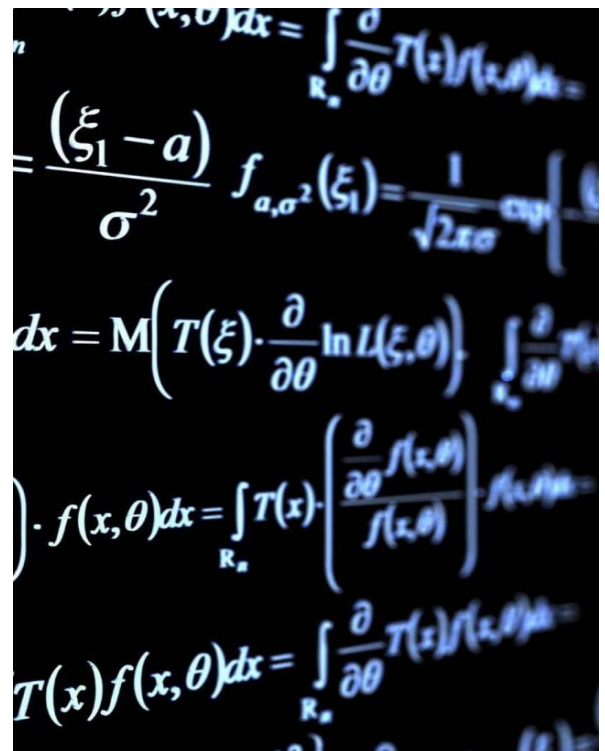
About Faculty:



Patrick Rault, Ph.D.

Associate Professor | Program
Director, Mathematics
rault@email.arizona.edu

Dr. Rault joined the UA South faculty in 2016 after teaching at SUNY Geneseo since Fall 2008, when he completed his Ph.D. at UW Madison. Dr. Rault's areas of research are number theory (specifically, arithmetic geometry) and linear algebra (specifically the study of numerical ranges in matrix analysis).



What are the Requirements to Enter the Program?

Because Mathematics is a transfer degree program, there are specific entrance requirements you must meet prior to admission to the program:

- Completion of 60 or more transferable credits from a regionally accredited institution
- A minimum 2.0 GPA in your transferable coursework
- Completion of lower division major and minor requirements and any prerequisite classes

Please contact us if you have any questions and/or to receive a pre-evaluation of your previously taken coursework to ensure your eligibility and readiness for the program. Visit uas.arizona.edu/admissions for more information.

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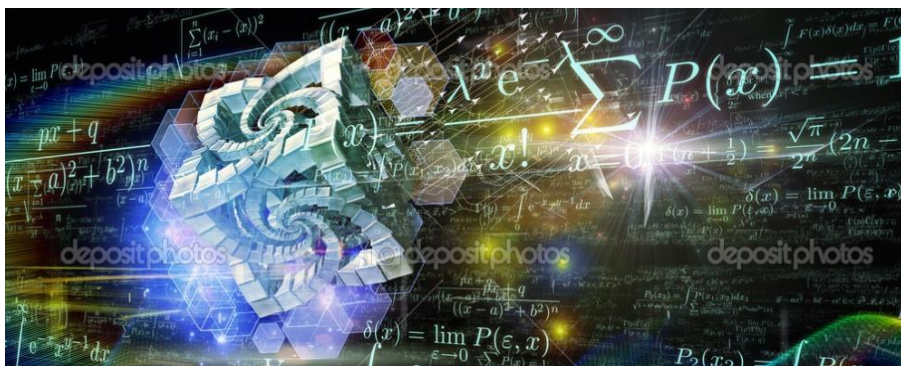
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Sample Courses in the Program

MATV 402 Mathematical Logic: Sentential calculus, predicate calculus; consistency, independence, completeness, and the decision problem. Designed to be of interest to majors in mathematics or philosophy.

MATV 443 Theory of Graphs and Networks: Undirected and directed graphs, connectivity, circuits, partitions, planarity, coloring problems, matrix methods, applications in diverse disciplines (Taught Fall semester in even-numbered years).

MATV 445 Introduction to Cryptography: Introduction to cryptosystems and cryptanalysis. Basic number theory and finite fields. Basic complexity theory and probability. RSA and Diffie-Hellman protocols, factorization and discrete log attacks. Advanced encryption standard. Additional topics as times allows.



Career Outlook

This degree prepares graduates for job opportunities in potential career areas such as:

Potential Career Areas

- Programming
- Analysis
- Network Administration
- Database Management
- Web/Systems Security

Sample Employers

- Government Agencies
- Information Technology Producers
- Entertainment Technology Industry
- Technology Consulting/Design Firms
- Colleges and Universities
- Medical Facilities

Average Job Salary Range

As more students pursue their degree in Mathematics, there is a growing need to illuminate the best career paths in the field:

Computer Scientist	\$32,000 - \$145,000
Information Technology Manager	\$76,420 - \$123,950
Statistician	\$30,000 - \$60,000
Information Scientist	\$53,590 - \$93,950
Computer Systems Analyst	\$40,650 - \$65,050
Database Programmer	\$70,681 - \$81,416
Network Administrator	\$40,000 - \$65,000
Computer Security Specialist	\$50,000 - \$80,000
Operations Research Analyst	\$39,000 - \$108,000

Sources of Information: United States Department of Labor: Bureau of Labor Statistics (2011)

Academic Advisors

Sierra Vista – (520) 458-8278	Online – (520) 626-1702
Santa Cruz County – (520) 287-8632	Pinal County – (520) 840-4878
Douglas – (520) 439-6882	Pima County – (520) 626-1702

IMAGINE
you at UA South

Questions?

For more information, reach out to a UAS representative.

You can find one in your area by visiting our website at:

<http://www.uas.arizona.edu>