R·I·T

OFFICE OF COOPERATIVE EDUCATION AND CAREER SERVICES
http://www.rit.edu/recruit

APPLIED MATHEMATICS BS

OVERVIEW FOR EMPLOYERS

School of Mathematical Sciences website: http://math.rit.edu

Employers need people who are able to use powerful mathematics to solve challenging real-world problems. RIT's Applied Mathematics program combines mathematics and computer science with a chosen **program concentration** in a related application field. Some of the many program concentrations that are available include actuarial science, biology, biostatistics, business, chemistry, economics, engineering, imaging science, operations research, physics, and premedical studies. Graduates of the Applied Mathematics program work in high-technology industry, business, federal agencies, and medical research laboratories. Many earn advanced degrees in mathematics or a related field.

Degree(s) Awarded

Bachelor of Science in Applied Mathematics

Bachelor of Science in Applied Mathematics & MBA (dual degree program)

Bachelor of Science in Applied Mathematics & Master of Science in Applied Mathematics (dual degree program)

Enrollment

Approximately 90 students are enrolled.

Cooperative Education Component

Students are eligible to participate in an optional co-op program upon completion of 2nd year courses. Participation is strongly encouraged.

Salary Information (Median/Range)

Co-op:	$16.50	$10.00 - $18.00
*BS:	$49,759	$35,000 - $60,000

*Statistics from the Nat'l Assn. Of Colleges & Employers (NACE) for 2007-2008 graduates

Equipment & Facilities

Students have access to programming, statistical and simulation languages, graphics software and design tools on a variety of platforms. Symbolic computation and statistical laboratories are also available.

Student Skills & Capabilities

- Formulating, modeling and solving problems; data analysis
- Computing Skills:
  Software: Mathematica, MATLAB, Maple, Minitab

  Language: Java

  Operating systems: UNIX, VMS, Mac OS, Windows NT

  Hardware: VAX, Macintosh, HP
- Communication; working in teams
- Students have a focus in the principal areas of analysis including calculus, differential equations, real variables, probability, and statistics, along with significant coursework in the discrete areas of mathematics including matrix, linear, and abstract algebra. In addition, students have many opportunities to pursue independent study or undergraduate research under the guidance of faculty members.

Applied Mathematics

Course Sequence BS degree

First Year:
Project-Based Calculus I – III
Discrete Math I
Computer Science I (intro to object-oriented systems; problem solutions with Java)
Computer Science II (problem solutions by creating and reusing components; exceptions; searching, etc.)
Science Electives
Liberal Arts

Second Year:
Multivariable Calculus
Differential Equations I
Probability & Applied Statistics I
Linear Algebra I
Vector Calculus
Mathematics Elective
Technical Writing
University-wide Electives

Third Year:
Numerical Analysis OR
Numerical Linear Algebra
Linear Algebra II
Mathematical Modeling
Mathematics Electives
Liberal Arts
General Education Electives

Fourth/Fifth Years*:
Real Variables I, II
Abstract Algebra I, II
Mathematics Electives
Program Concentration Courses**
General Education Electives

* Program can typically be completed in four years.

** Specialization in program concentration:

Each student must select one **program concentration.** The most commonly selected program concentrations include:

- Actuarial Science
- Applied Statistics
- Biology/Biostatistics
- Business/Finance
- Chemistry
- Economics
- Engineering
- Imaging Science
- Operations Research
- Pure Mathematics
- Physics

Employers of Applied Mathematics Co-op and Graduating Students:

Blue Cross/Blue Shield, CIGNA Healthcare, Cognigen Corp., Eastman Kodak, Harris Interactive Inc., Institute for Defense Analyses, NASA, National Geospatial-Intelligence Agency, National Security Agency, Ortho-Clinical Diagnostics, Sigma Marketing, U.S. Census Bureau, Xerox Corp.

Contact Us:

We appreciate your interest in hiring RIT co-op, graduating students or alumni. We will make every effort to make your recruiting endeavor a success. Call our office and ask to speak with Kara Leonard, the program coordinator who works with the Applied Mathematics program. For your convenience, you can access information and services through our web site at http://www.rit.edu/recruit.

Kara Leonard
Program Coordinator
Office of Cooperative Education and Career Services
RIT . Bausch & Lomb Center . 57 Lomb Memorial Drive . Rochester NY 14623-5603
585.475.7413
kmloce@rit.edu