R·I·T

OFFICE OF COOPERATIVE EDUCATION AND CAREER SERVICES

http://www.rit.edu/recruit

APPLIED STATISTICS BS

PROGRAM OVERVIEW FOR EMPLOYERS

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

RIT's Applied Statistics program provides students with a strong foundation in mathematical and statistical principles, experience with real-world applications, and a solid background in advanced statistical software packages. Students in this program learn to effectively apply statistics to problems in data analysis, quality control, reliability analysis, experimental design, survey sampling, and statistical forecasting. In addition, students learn the important skills of designing an experiment, selecting and formulating appropriate statistical models, interpreting and analyzing data, and communicating the results in written and oral form. Students also select a **program concentration** in a related application field. Program concentrations include actuarial science, biology, biostatistics, chemistry, economics, finance, industrial engineering, marketing, operations research, psychology, and public policy. Graduates of RIT's Applied Statistics program find outstanding professional opportunities in business, industry, and government, and are accepted into the very best graduate programs.

Degree(s) Awarded

Bachelor of Science in Applied Statistics

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

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

Enrollment

Approximately 25-30 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 (Avg/Range)

Co-op:	$18.61	$14.59 - $27.50
*BS:	$55,300	$44,176 - $62,200

*Statistics from the Nat'l Assn. Of Colleges & Employers (NACE) for 2010-2011 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

- Data analysis, simple and multiple regression analysis, interpretation and presentation of data, problem solving, experimental design, survey sampling, quality control methodologies, statistical inference and statistical modeling.
- Computer Skills:
  Software: SAS, SPSS, Mathematica, MATLAB, Maple, Minitab
  Programming Languages: Java (dependent upon course sequence selected by student)
  Operating Systems: UNIX, VMS, Mac OS, Windows NT

Applied Statistics

Course Sequence BS degree

First Year:
Project-Based Calculus I – III
Discrete Math I
Principles of Computer Science OR
Problem-Based Intro to Computer Science
Statistical Computing with Excel and Minitab
University-wide Electives
Science Electives
Liberal Arts

Second Year:
Multivariable Calculus
Differential Equations
Probability
Applied Statistics
Statistical Computing (SAS)
Linear Algebra I
Statistical Quality Control OR
Research Sampling Techniques
Technical Writing
Liberal Arts

Third Year:
Linear Algebra II
Regression Analysis
Design of Experiments
Program Concentration Course**
Liberal Arts
General Education Electives

Fourth and Fifth Years*:
Nonparametric Statistics
Mathematical Statistics I, II
Statistics Seminar
Program Concentration Courses**
University-wide Electives
General Education Electives
Liberal Arts

* Program can typically be completed in four years.

** Specialization in program concentration:

Students may choose up to 16 credit hours from a program concentration. Some commonly selected program concentrations include:

- Actuarial Science
- Biology/Biostatistics
- Business/Finance
- Chemistry
- Economics
- Industrial Engineering
- Marketing
- Operations Research
- Public Policy
- Psychology

Employers of Applied Statistics Co-op and Graduating Students:

Blue Cross/Blue Shield, Center for Army Analysis, CIGNA Healthcare, Cognigen Corp., Corning Tropel Corp., Deloitte Services LP, Harbridge Consulting Group, Harris Interactive Inc., Liberty Mutual Insurance Co., LMI, Mayo Clinic, Minitab Inc., National Grid, Novum Pharmaceutical Research Services, Ortho-Clinical Diagnostics, Paychex, Pfizer Inc., Schott North America, U.S. Bureau of Labor Statistics, U.S. Census Bureau, Xerox Corp.

Contact Us:

We appreciate your interest in RIT co-op, graduating students or alumni. We will make every effort to make your recruiting endeavor a success. Feel free to contact Kara Leonard and Lisa Monette, the program coordinators who work with the Applied Statistics program. For your convenience, you can access information and services through our web site at http://www.rit.edu/recruit.

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