

INDIANA UNIVERSITY

University Graduate School
2005-2006
Academic Bulletin

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Applied Statistics

School of Science
Indianapolis

Director

Associate Professor Krzysztof Podgorski*

Graduate Faculty

(An asterisk [*] denotes membership in the University Graduate School faculty with the endorsement to direct doctoral dissertations.)

Professors

Benzion Boukai*, Robert M. Kleyale*

Associate Professors

Krzysztof Podgorski*, Jyotirmoy Sarkar*

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Academic Advisor

Associate Professor Krzysztof Podgorski*, Department of Mathematical Sciences, LD 270, IUPUI, (317) 274-8070

Ph.D. Minor in Applied Statistics

The Department of Mathematical Sciences in the School of Science at IUPUI has developed a master's degree program in mathematical sciences with a specialization in applied statistics. Accordingly, some doctoral students in the Department of Basic Medical Science in the School of Medicine may find it useful to have a minor in applied statistics as an additional option in their program of study.

Course Requirements

Twelve (12) hours of credit in courses approved for the minor in applied statistics, including STAT 511, STAT 512, and 6 additional credit hours chosen in consultation with the minor representative. For students in Medical and Molecular Genetics, a common option would be to take two of the courses from 523, 524, and 533. Statistical Quality Control (513) might be a desirable elective for students in Pharmacology and Toxicology. Students who have successfully completed Q650 Biostatistics I and Q651 Biostatistics II in the School of Medicine will be exempted from STAT 511.

Examinations

The determination of procedures for meeting the requirements for the minor and the examination procedure prior to admittance to candidacy will be at the discretion of the student's minor representative on his or her advisory committee from the Department of Mathematical Sciences.

Courses

Core Courses

STAT 511 Statistical Methods (3 cr.)

STAT 512 Applied Regression Analysis (3 cr.)

Other Courses

STAT 513 Statistical Quality Control (3 cr.)

STAT 514 Design of Experiments (3 cr.)

STAT 515 Statistical Consulting Problems (3 cr.)

STAT 519 Introduction to Probability (3 cr.)

STAT 520 Time Series and Applications (3 cr.)

STAT 522 Sampling and Survey Techniques (3 cr.)

STAT 523 Categorical Data Analysis (3 cr.)

STAT 524 Applied Multivariate Analysis (3 cr.)

STAT 528 Mathematical Statistics I (3 cr.)

STAT 529 Bayesian Statistics and Applied Decision Theory (3 cr.)

STAT 530 Mathematical Statistics II (3 cr.)

STAT 532 Elements of Stochastic Processes (3 cr.)

STAT 533 Nonparametric Statistics (3 cr.)