IU INDIANA UNIVERSITY

University Graduate School
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Academic Bulletin

Applied Statistics

School of Science
Indianapolis

Director
Associate Professor Jyotirmoy Sarkar*

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

Professors
Benzion Boukai*, Robert M. Kleyle (Emeritus)

Associate Professors
Hanxiang Peng, Jyotirmoy Sarkar*

Assistant Professors
Samiran Ghosh, Fang Li, Ryan Martin

Contact Information
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Ph.D. Minor in Applied Statistics

The Department of Mathematical Sciences in the School of Science at IUPUI offers 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 or other programs may find it useful to have a minor in applied statistics as an additional option in their program of study.

Course Requirements

Twelve credit hours in courses approved for the minor in applied statistics, including STAT 51100, STAT 51200, and six 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 52300, 52400, and 53300. Statistical Quality Control (51300) might be a desirable elective for students in pharmacology and toxicology. Students who have successfully completed GRAD

G651 Introduction to Biostatistics I and GRAD G652 Introduction to Biostatistics II in the School of Medicine will be exempted from STAT 51100.

Examinations
The exact requirements for the minor and the examination procedure prior to admittance to candidacy are determined by the student's minor representative on his or her advisory committee from the Department of Mathematical Sciences.

Courses

Core Courses
STAT 51100 Statistical Methods (3 cr.)
STAT 51200 Applied Regression Analysis (3 cr.)

Other Courses
STAT 51300 Statistical Quality Control (3 cr.)
STAT 51400 Design of Experiments (3 cr.)
STAT 51500 Statistical Consulting Problems (3 cr.)
STAT 51900 Introduction to Probability (3 cr.)
STAT 52000 Time Series and Applications (3 cr.)
STAT 52200 Sampling and Survey Techniques (3 cr.)
STAT 52300 Categorical Data Analysis (3 cr.)
STAT 52400 Applied Multivariate Analysis (3 cr.)
STAT 52800 Mathematical Statistics I (3 cr.)
STAT 52900 Bayesian Statistics and Applied Decision Theory (3 cr.)
STAT 53000 Mathematical Statistics II (3 cr.)
STAT 53200 Elements of Stochastic Processes (3 cr.)
STAT 53300 Nonparametric Statistics (3 cr.)