

Our Program

The current focus on high technology in this country has created new and different job opportunities, as well as shifted the emphasis for certain areas of expertise. One particular demand in the high-tech industry is for applied statisticians. Applied statisticians are vital to pharmaceutical research and development, government public policy, genomic research, economic planning and analysis, and psychometrics. Because the **Master of Science in Applied Statistics** is a state-of-the-art program that brings together statistical theory, computer science, scientific research, and communication skills, this degree will prepare you for immediate employment in a variety of high-paying industry positions, as well as doctoral study in applied statistics or a related field. We encourage students from diverse academic backgrounds to consider our program. Due to the interdisciplinary nature of the program, various undergraduate majors and interests are eligible for admissions.

Our program emphasizes a flexible curriculum that allows you to explore various concentrations, such as biology, mathematics, computer science, psychology, health sciences, business, pharmaceutical product development, or other self-designed, multidisciplinary concentrations. Prominent statisticians also have served as visiting lecturers on topics of current interest in applied statistics. If you are interested in a particular topic, you can pursue intensive study with a faculty member through the thesis option. You will receive hands-on work experience as well in supervised, paid internships at local companies.

Our Curriculum

The order of the M.S. courses is designed so that you will learn, in the first semester, the computer programming skills necessary for statistical analyses of data, the basic underlying theory of mathematical statistics, and an introduction to your chosen area of concentration. All subsequent courses will combine statistical and computational procedures with an eye towards the specific application of these skills. These courses will give you the abilities required to design experiments, perform advanced analysis on data from various settings, and communicate complex statistical ideas. You also will have the opportunity to learn about specific topics of current importance, such as design, monitoring, and analysis for clinical trials, survival analysis, longitudinal analysis, statistical genetics, and computational statistics.

To culminate your degree, you will receive hands-on experience working with statisticians and scientists in a paid internship at one of the many international companies located in the area. We will match you to an internship based upon your interests and career goals. If you wish to engage in independent statistical research or further graduate study, the thesis track will provide you the opportunity to conduct supervised research in your area of interest with a faculty member.

Certificate Program in Applied Statistics

If you wish to pursue your studies on a part-time basis or just learn some new skills, the Certificate Program in Applied Statistics is a viable and exciting option. This 19-credit hour program is a hands-on curriculum that will give you knowledge and experience in applying statistical and computational procedures to real-life problems. For instance, you will learn how

to effectively design and analyze data from a clinical trial.

The Certificate Program offers a broad overview and introduction to application of statistical concepts to various research settings. This program emphasizes hands-on course work, rather than the internship opportunity and independent research option.

Benefits of Our Program

- Small classes
- Paid, supervised internships
- Close work with faculty and industrial statisticians
- Exciting research opportunities
- Lucrative and rewarding career opportunities
- Flexible elective course offerings
- Development of skills for a Ph.D. program
- Affordable tuition
- Assistantships and tuition waivers available
- Option for certificate in applied statistics

Information:

For information regarding the applied statistics program, contact the program director:

Dr. Randall H. Rieger
Department of Mathematics
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Phone: 610-436-2440
Fax: 610-436-2165
E-mail: rrieger@wcupa.edu

Or view our Web site:
<http://math.wcupa.edu/AppliedStatistics>

For application materials, contact the Office of
Graduate Studies and Extended Education:

McKelvie Hall
102 Rosedale Avenue
West Chester University
West Chester, PA 19383

Phone: 610-436-2943
Fax: 610-436-2763
E-mail: gradstudy@wcupa.edu

Admissions Procedure

The following should be submitted to the
Office of Graduate Studies and Extended
Education:

- Completed graduate application including goals statement
- Three letters of recommendation
- Transcripts of all undergraduate courses