

# STATISTICS (STAT)

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**STAT 501 Statistical Computing 3 Credit Hour(s)**

An introduction to statistical computing and developing programming skills to perform statistical analyses.

**Offered:** Online

**STAT 502 Regression Analysis and Modeling 3 Credit Hour(s)**

**Online Prerequisite:** STAT 501

Linear and multiple regression analysis and modeling.

**Offered:** Online

**STAT 510 Experimental Design 3 Credit Hour(s)**

**Online Prerequisite:** STAT 501

Introduction to experimental designs and analysis of data from experiments.

**Offered:** Online

**STAT 513 Bayesian Statistics 3 Credit Hour(s)**

**Online Prerequisite:** STAT 501

Introductory topics in Bayesian inference.

**Offered:** Online

**STAT 514 Nonparametric Statistics 3 Credit Hour(s)**

**Online Prerequisite:** STAT 501

This course provides an overview of nonparametric statistics.

**Offered:** Online

**STAT 541 Probability 3 Credit Hour(s)**

The course introduces the basic concepts and methods of probability.

Topics include: set notation and operations, properties of probability, expectation, and discrete and continuous probability distributions of a single random variable.

**Offered:** Online

**STAT 542 Mathematical Statistics 3 Credit Hour(s)**

**Online Prerequisite:** STAT 541

A course that delves into the theoretical foundations and advanced methodologies underpinning modern statistical inference.

**Offered:** Online

**STAT 543 Advanced Statistical Methods 3 Credit Hour(s)**

**Online Prerequisite:** STAT 542

This course covers advanced inferential statistical topics.

**Offered:** Online

**STAT 545 Exploratory Data Analysis 3 Credit Hour(s)**

**Online Prerequisite:** STAT 501

Focuses on analyzing trends, patterns, and relationships in data sets using statistical and visualization methods.

**Offered:** Online

**STAT 550 Statistical Consulting Practicum 3 Credit Hour(s)**

**Online Prerequisite:** STAT 501 and STAT 543

An advanced-level course designed to provide students with hands-on experience in real-world statistical consulting scenarios.

**Offered:** Online