

# STATISTICS (STAT)

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**STAT 200 Introduction to Statistical Computing 3 Credit Hour(s)**

**Prerequisite:** CSIS 111 and MATH 131

This course focuses on using software to perform statistical analysis.

**Offered:** Online

**STAT 211 Introduction to Statistical Analysis 3 Credit Hour(s)**

**Prerequisite:** MATH 131

An introduction to statistical analysis for students with a background in calculus. Includes probability theory, probability distributions, expectation, statistical inference, regression and correlation.

**Offered:** Online

**STAT 300 Introduction to Experimental Design 3 Credit Hour(s)**

**Prerequisite:** MATH 211

Introduction to experimental designs and analysis of data from experiments.

**Offered:** Online

**STAT 412 Advanced Statistical Methods 3 Credit Hour(s)**

**Prerequisite:** MATH 211 or STAT 211

This course covers advanced inferential statistical topics.

**Offered:** Online

**STAT 420 Regression and Forecasting I 3 Credit Hour(s)**

**Prerequisite:** MATH 131 and MATH 211

A calculus-based mathematical inquiry on forecasting, using statistics and regression.

**Offered:** Online

**STAT 421 Regression and Forecasting II 3 Credit Hour(s)**

**Prerequisite:** STAT 420

An advanced course on forecasting, using statistics and regression.

**Offered:** Online

**STAT 441 Probability 3 Credit Hour(s)**

**Prerequisite:** MATH 132

Set notation and operations, properties of probability, expectation, and discrete and continuous probability distributions of a single random variable.

**Offered:** Online

**STAT 445 Exploratory Data Analysis 3 Credit Hour(s)**

**Prerequisite:** STAT 200 and STAT 211

This course focuses on exploring patterns in data sets using statistical and visualization methods.

**Offered:** Online

**STAT 491 Capstone: Case Studies in Data Science 3 Credit Hour(s)**

**Prerequisite:** STAT 445

This course is designed to apply skills in statistical analysis and interpretation, review learned statistical concepts, and solidify Christian worldview thinking.

**Registration Restrictions:** Senior status

**Offered:** Online