# Requirements for Statistics Major

The Statistics major for MBA students is typically combined with a major in an area of applications, most often Marketing or Finance.

A total of five credit units are required, with at least 3 credit units from Statistics. Stat 613 may count as 1 of these. Alternatively, Stat 621 can be included (1/2 credit).

Courses taken on a Pass/Fail basis cannot be counted toward the major. Many courses in Statistics that can be used to satisfy the requirement are not listed as MBA courses and do not appear in the course auction. For courses not in the auction, you must sign up through the university course registration process. That usually happens around the middle of the prior semester.

## **Courses in Statistics**

The following courses offered by the Department of Statistics are eligible for the major. Depending on the program of study, others courses may also be acceptable with permission.

STAT 430/510 Probability

STAT 432/512 Mathematical Statistics

STAT 433 Stochastic Processes

STAT 474 Modern Regression for Social and Environmental Sciences

STAT 520 Applied Econometrics I

STAT 521 Applied Econometrics II

STAT 540 Statistical Methods and Computation

STAT 622 Statistical Modeling

STAT 701 Advanced Statistics for Management

STAT 711 Forecasting Methods for Management

STAT 853 Actuarial Statistics

STAT 854 Applied Statistical Methods for Actuaries

STAT 950 Quantitative Consulting Practicum

The following courses are also eligible, but presume a more extensive mathematical background. Contact the instructor for more information and requirements.

STAT 550 Mathematical Statistics

STAT 910 Forecasting and Time Series Analysis

STAT 920 Sample Survey Methods

STAT 925 Multivariate Analysis

## **Courses in Other Departments**

Selected courses offered by other departments are permitted to contribute toward the major if they have sufficient statistical content. The list below is suggestive; any courses outside those offered by the Department of Statistics are subject to approval if counted toward the concentration. If you plan to count courses from outside Statistics as part of the concentration, your collection must be approved.

# **Marketing**

MKTG 712 Marketing Research MKTG 776 Applied Probability Models in Marketing

#### **Finance**

FNCE 717 Financial Derivatives FNCE 720 Investment Management FNCE 725 Fixed Income Securities FNCE 892 Financial Engineering

## **Operations (OPIM)**

OPIM 653 Mathematical Modeling and its Application in Finance

#### **Insurance**

INSR 831 Applied Statistical Methods for Actuaries INSR 833 Actuarial Statistics

## **Examples**

As an illustration, the following collection of courses is appropriate for a student with interests in Finance who also wishes to have a concentration in Statistics.

Statistical Methods for Managers (½ c.u.)
Statistical Methods (½ c.u.)
Financial Time Series
Probability and Statistics
Forecasting
Financial Derivatives

For a student with interests in Marketing, these courses would be suitable for a concentration in Statistics (3 c.u. in Statistics):

STAT 613	Statistical Methods
STAT 510	Probability and Statistics
STAT 920	Sample Survey Methods
MKTG 712	Marketing Research
MKTG 776	<b>Applied Probability Models</b>