QM-Quantitative Methods Courses

Courses

QM 214. Quantitative Analysis I. 3 Hours.
This course is an introductory course to statistics and data analyses for business students. Students will be exposed to basic statistical concepts and procedures to handle the data. Students are expected to recognize the nature of their data, select appropriate procedures, perform requisite calculations, demonstrate computer proficiency, and explain the results to layperson.

Prerequisites: (MA 105 [Min Grade: C] or MA 106 [Min Grade: C] or MA 109 [Min Grade: C] or MA 125 [Min Grade: C]) and BUS 110 [Min Grade: C]

QM 215. Quantitative Analysis II. 3 Hours.
QM215 is the sequel of QM214 and a continuation of introductory statistics and data analyses. Built upon students' understanding of descriptive statistics and probability, this course exposes students to inferential statistics. Upon finishing the course, students are expected to know how to formulate hypotheses, collect data, select appropriate model(s), conduct statistical analyses, and present statistical findings with proper support of statistical graphs.

Prerequisites: QM 214 [Min Grade: C]

QM 350. Quantitative Methods for Finance. 3 Hours.
Development of the mathematical foundations of undergraduate level financial modeling and analysis, including applications of calculus, probability theory, linear algebra and Monte Carlo simulation to the measurement of asset returns and the assessment of risk, to the pricing of options and other financial derivatives, and to the solution of important financial optimization problems.

Prerequisites: (QM 215 [Min Grade: C] and GPAU and GPAO 2.00) and (QM 215 [Min Grade: C] and GPAU 2.00 and GPAO 2.00)

QM 420. Applied Forecasting. 3 Hours.
Practical use of various forecasting techniques on business and economic data. Topics include dynamic regression models, exponential smoothing, forecast criteria, moving averages, seasonality, and univariate Box Jenkins ARIMA modeling. Completion of all pre-business requirements required.

Prerequisites: (GPAT and GPAO 2.00 and AC 201 [Min Grade: C] and EC 210 [Min Grade: C] and EC 211 [Min Grade: C] and LS 246 [Min Grade: C] and QM 215 [Min Grade: C]) or (GPAT 2.00 and GPAO 2.00 and AC 201 [Min Grade: C] and EC 210 [Min Grade: C] and EC 211 [Min Grade: C] and LS 246 [Min Grade: C] and QM 215 [Min Grade: C])

QM 490. Advanced Topics in Statistics/Management Science. 3 Hours.
Statistics/management science application to problems in business and economics.

Prerequisites: (GPAT and GPAO 2.00) or (GPAU 2.00 and GPAO 2.00)

QM 499. Directed Readings in Quantitative Methods. 1-3 Hour.
Readings and independent study in selected areas.

Prerequisites: (GPAT and GPAO 2.00) or (GPAU 2.00 and GPAO 2.00) and EC 211 [Min Grade: C] and QM 215 [Min Grade: C] and EC 210 [Min Grade: C]