

ANALYTICS AND OPERATIONS MANAGEMENT (ANOP)

ANOP 203. Introduction to Programming for Business Analytics. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

Overview of programming tools and methods for analytics. Students solve computational and modeling problems using Python. This foundation of programming logic will help students understand advanced analytic tools in the upper-level Business Analytics courses. Not open to students who have taken CSCI 203.

ANOP 270. Data Visualization for Business Analytics. 1 Credit.**Lecture hours:3**

An introduction to the principles of data visualization. Students use software tools to effectively create tables, charts, figures, infographics, and exhibitions to aid in oral or written communication of quantitative insights. Prerequisite: MGMT 102 or MATH 216 or PSYC 215.

ANOP 310. Independent Study in Analytics and Operations Management. 1 Credit.**Offered Either Fall or Spring; Lecture hours:Varies,Other:3**

Independent Study in Analytics and Operations Management. Prerequisite: permission of the instructor.

ANOP 311. Supply Chain Analytics. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

In this course students will learn basic concepts in quantitative supply chain modeling and simulation. Students learn methods that are used extensively in business organizations to solve large, structured problems. Prerequisite: MATH 216 or MGMT 102 or PSYC 215.

ANOP 315. Special Topics in Analytics and Operations Management. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

Special Topics in Analytics and Operations Management. Prerequisite: permission of the instructor.

ANOP 330. Predictive Analytics. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

Study and apply methods for efficient data collection, management, and mining using large-scale datasets. Topics include prediction and classification methods, clustering, and association rules. Prerequisites: MGMT 102 or MATH 216 or PSYC 215 and ANOP 203 or CSCI 203.

ANOP 350. Simulation and Forecasting for Business Analytics. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

Study of statistical modelling and simulation techniques for data and model-based forecasting (Time Series, Smoothing Methods, Regression, ARIMA, Simulation, etc.) using a variety of software tools. Prerequisites: MGMT 102 or MATH 216 and ANOP 203 or CSCI 203.

ANOP 370. Prescriptive Analytics. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

An introduction to decision modelling and analysis using optimization models and solution methodologies. Prerequisites: MGMT 102 or MATH 216 and ANOP 203 or CSCI 203.

ANOP 390. Honors Course in Analytics and Operations Management. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

Honors Course in Analytics and Operations Management. Prerequisite: permission of the instructor.

ANOP 400. Business Analytics Practicum. 1 Credit.**Offered Either Fall or Spring; Lecture hours:3**

A culminating experience course where student teams collaborate with external clients in the private, public, and non-profit sectors to work on a semester long project leveraging the skills and concepts acquired within the Business Analytics major. Prerequisite: open only to senior Business Analytics majors or by permission of the instructor.