# Advanced Analytics (AA)

### AA 500 Analytics Tools and Techniques (3 credit hours)

This course equips the student with basic and advanced computer programming skills needed to use industry-standard analytics tools for data analysis, including but not limited to: data access and management, data cleaning, data mining, text mining, geospatial analytics, forecasting, and optimization. Restricted to AA majors.

Corequisite: AA 501

Typically offered in Summer only

# AA 501 Analytics Foundations (3 credit hours)

This course equips the student with basic knowledge of statistics required for further study in analytics. Topics include, but are not limited to: Exploratory Data Analysis, Linear Regression, Multiple Linear Regression, Regression Diagnostics, Logistic Regression, ANOVA, Cluster Analysis, Analysis of Tables, and Survey Data Analysis. Restricted to AA major.

Corequisite: AA 500

Typically offered in Summer only

### AA 502 Analytics Methods and Applications I (6 credit hours)

This course equips the students with the methods and applications of advanced analytics. Topics include, but are not limited to: Time Series and Forecasting, Geospatial Data Analytics, Linear Algebra, Data Mining, Survival Data Analysis and Logistic Regression Models. Restricted to AA major.

Prerequisite: AA 500 and AA 501; Corequisite: AA 504

Typically offered in Fall only

# AA 503 Analytics Methods and Applications II (6 credit hours)

This course equips the student with the methods and applications of advanced analytics. Topics include, but are not limited to: Advanced Data Mining, Text Mining, Financial Analytics, Risk Analytics, Marketing Science and Customer Analytics, Linear and Non-Linear Programming. Restricted to AA major.

Prerequisite: AA 502; Corequisite: AA 505

Typically offered in Spring only

### AA 504 Analytics Practicum I (6 credit hours)

This course equips the student with the knowledge and skills needed to conduct and present large-scale studies based on advanced analytics. Student teams conduct analysis using large amounts of real-world data. Restricted to AA major.

Prerequisite: AA 500 and AA 501; Corequisite: AA 502

Typically offered in Fall only

# AA 505 Analytics Practicum II (6 credit hours)

A continuation of AA 504, this course equips the student with the knowledge and skills needed to conduct and present large-scale studies based on advanced analytics. Student team conduct analysis using large amounts of real-world data. Restricted to AA majors.

Prerequisite: AA 504; Corequisite: AA 503

Typically offered in Spring only

# AA 591 Special Topics in Advanced Analytics (1-6 credit hours)

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