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 670

*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 501 and AA 670; 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 501 and AA 670; 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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