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)
Special Topics in Advanced Analytics