



## Data Science and Analytic Storytelling (MS)

*This plan was made under the assumption that a student is beginning coursework in the **Fall semester** and plans to pursue courses **full-time**. A total of **30 credit hours** is required to graduate from the program, divided into "**Data Science Core**" (18 cr), "**Analytic Storytelling**" (6 cr), and the "**Electives**" (6 cr). Other combinations of coursework are available for students beginning in the Fall semester, full-time!*

### FALL - Semester 1

**A Term:**

- PDAT 610G: Introduction to Data Science (3 cr)\*

**B Term:**

- PDAT 611G: Big Data Management (3 cr)

**Full Semester:**

- STAT 530G: Applied Statistical Methods I (3 cr)

### SUMMER - Semester 3

**8-Week Session:**

- PDAT 617G: Python for Data Science (3 cr)

### SPRING - Semester 2

**A Term:**

- PDAT 613G: Data Mining (3 cr)

**B Term:**

- PDAT 615G: Machine Learning (3 cr)

**Full Semester:**

- PDAT 625G: Big Data Ethics and Security (3 cr)

### FALL - Semester 4

**A Term:**

- PDAT 622G: Narrative, Argument, and Persuasion in Data Science (3 cr)

**B Term:**

- PDAT 624G: Principles of Design in Data Visualization (3 cr)\*\*

### SPRING - Semester 5

**A Term:**

- PDAT 630G: Data Science and Analytic Storytelling Thesis (3 cr)

### NOTES:

- "A Term" and "B Term" courses are 8-weeks. Full-semester courses are 16-weeks.
- (\*) - Prior to enrolling in the first data science course (PDAT 610G), students must have completed the equivalent to **CS 170** (Intro to Computer Science) and **STAT 190** (Basic Statistics).
  - Students who have taken the equivalent to **STAT 220** (Fundamentals of Data Science), **STAT 250** (Statistical Computing), and **other undergraduate courses in Data Science** may be allowed to substitute another graduate course in the place of **PDAT 610G**.
- (\*\*) - Students who have taken the equivalent to **STAT 320** (Data Visualization) may be allowed to substitute another graduate course in place of **PDAT 624G** (Principles of Design in Data Visualization).

**Graduate Program Director:** Please contact the Center for Academic Excellence (advise@truman.edu) with any updates to the plan above. Updated 9-19-2024