College of Health, Science and Technology

Bloomsburg LOCK HAVEN MANSFIELD
COMMONWEALTH UNIVERSITY

Minor in Data Science

This checklist is based on the current academic catalog and is subject to change. Students should meet with their academic advisor each semester and use Degree Works to monitor their individual progress toward completion of the minor.

The program requires 18 hours of Data Science, Computer Science and Mathematics courses. The quality point average of all courses applied to the minor in Data Science must be at least 2.0 based on a 4.0 system. An outline of the courses includes:

Curriculum Checklist

REQUIRED COURSES (6 Credits Required)
____ CMSC 115: Python Programming
____ DATS 110: Intro to Data Science

INTRODUCTORY STATISTICS COURSE
Choose any one elective (3 Credits Required)

____ STAT 141: Introduction to Statistics
____ PSYC 150: Applied Psychological Statistics
____ SOCI 251: Introduction to Quantitative Analysis in Sociology
____ CRJU 251: Criminal Justice Statistics
____ Other introductory courses may be acceptable with the approval of the department (3 credits)

ELECTIVES
Choose three elective courses (9 Credits Required)**

____ CMSC 215: Advanced Python Programming*
____ DATS 210: Data Visualization
____ DATS 310: Databases for Big Data*
____ DATS 320: Data Mining*
____ DATS 410: Machine Learning*
____ DATS 420: Advanced Data Science*
____ STAT 240: Statistical Methods*
____ STAT 340: Statistical Software*
____ STAT 342: Design & Analysis of Experiments*
____ STAT 343: Applied Regression Analysis*
____ STAT 446: Biostatistics*
____ Independent Study (related to data analysis) with the approval of the department (3 credits)*

*Advanced coursework.

**An appropriate class from another department, such as GIS from EGGS, Data Analytics from ITA may be used as the elective course with approval by the Department of Mathematics, Computer Science and Digital Forensics.

Total Credits *Required for the Minor* (18 Credits, including at least 6 credits of advanced coursework)

Campus Locations

Bloomsburg	☒ Online; ☒ In-person; ☒ Blended
Lock Haven	☒ Online; ☒ In-person; ☒ Blended
Mansfield	☒ Online, ☐ In-person; ☒ Blended
Clearfield	☐ Online; ☐ In-person; ☐ Blended

Revised October 2024