

DATA SCIENCE MINOR

Degree Requirements (18-19 Hours)

Prerequisites (8 hours)

| Course | Title | Credits |
|---------------------------|--|----------|
| MATH 122 | Calculus for Business Administration and Social Sciences | 3 |
| or MATH 141 | Calculus I | |
| Total Credit Hours | | 3 |

Minor Requirements (18 or 19 Hours)

| Course | Title | Credits |
|---|---|-----------|
| Required Foundation Course | | |
| CSCE 145 | Algorithmic Design I | 4 |
| or CSCE 206 | Scientific Applications Programming | |
| Core Computing Courses | | |
| CSCE 587 | Big Data Analytics | 3 |
| CSCE 567 | Visualization Tools | 3 |
| Core Statistics Courses | | |
| STAT 509 | Statistics for Engineers | 3 |
| or STAT 515 | Statistical Methods I | |
| STAT 530 | Applied Multivariate Statistics and Data Mining | 3 |
| Elective Course | | |
| Select one of the following: | | 3 |
| Options requiring no additional pre-requisites: | | |
| CSCE 146 | Algorithmic Design II | |
| STAT 516 | Statistical Methods II | |
| Options requiring additional pre-requisites: | | |
| MATH 344 | Applied Linear Algebra | |
| CSCE 520 | Database System Design | |
| CSCE 564 | Computational Science | |
| CSCE 569 | Parallel Computing | |
| CSCE 582 | Bayesian Networks and Decision Graphs | |
| STAT 511 | Probability | |
| STAT 512 | Mathematical Statistics | |
| STAT 517 | Advanced Statistical Models | |
| STAT 535 | Introduction to Bayesian Data Analysis | |
| STAT 582 | Bayesian Networks and Decision Graphs | |
| Total Credit Hours | | 19 |

Note: The Data Science Minor is designed for students in any discipline that uses large data sets, including Biology, Business, Mathematics, Psychology, etc. Choosing the correct courses is more complicated for students majoring in Computer Engineering, Computer Science, Computer Information Systems, and Statistics.

Course Substitutions

No course used to satisfy a Carolina Core, major, or other minor requirement may be used for the Data Science Minor. In the event of conflict, any elective course may be substituted for a required course in this minor.

Administration of the Minor

Curricula and other decisions of the minor will be made by a committee composed of two faculty appointed by the Chair of Statistics and two faculty appointed by the Chair of Computer Science and Engineering.