Data Science Courses

Courses

DSCI 101. Foundations of Data Science I. 4 Credits.
This course utilizes a quantitative approach to explore fundamental concepts in data science. Students will develop key skills in programming and statistical inference as they interact with real-world data sets across a variety of domains. Ethical and privacy concerns are explored. Sequence with DSCI 102.

DSCI 102. Foundations of Data Science II. 4 Credits.
This course expands upon critical concepts and skills introduced in DSCI 101. Topics include the normal distribution, confidence intervals, regression, and classifiers. Sequence with DSCI 101.
Prereq: DSCI 101, MATH 101 (or equivalent placement score) or any other college-level math course.

DSCI 196. Field Studies: [Topic]. 1-12 Credits.
Repeatable.

DSCI 198. Workshop: [Topic]. 1-12 Credits.
Repeatable.

DSCI 199. Special Studies: [Topic]. 1-5 Credits.
Repeatable.

DSCI 299. Special Studies: [Topic]. 1-5 Credits.
Repeatable.

DSCI 311. Principles and Techniques of Data Science. 4 Credits.
Intermediate and advanced techniques in data science. Topics include managing data using software programs, data cleaning, handling text, dimensionality, principle component analysis, regression, classification and inference.
Prereq: DSCI 102, CS 211, MATH 342.

DSCI 345M. Probability and Statistics for Data Science. 4 Credits.
Introduction to probability and statistics, with an emphasis upon topics relevant for data science. Students cannot get credit for both MATH 343 and DSCI 345M/MATH 345M.
Prereq: MATH 342, CS 211.

DSCI 372M. Machine Learning for Data Science. 4 Credits.
Introduction to Machine Learning, with an emphasis on topics relevant for data science. Multilisted with CS 372M.
Prereq: CS 212, DSCI 345M, MATH 342.

DSCI 399. Special Studies: [Topic]. 1-5 Credits.
Repeatable.

DSCI 400M. Temporary Multilisted Course. 1-5 Credits.
Repeatable.

DSCI 401. Research: [Topic]. 1-12 Credits.
Repeatable.

DSCI 402. Supervised College Teaching. 1-6 Credits.
Repeatable for a max of 6 credits.

DSCI 403. Thesis. 1-12 Credits.
Repeatable.

DSCI 404. Internship: [Topic]. 1-12 Credits.
Repeatable.

DSCI 405. Reading and Conference: [Topic]. 1-5 Credits.
Repeatable.

DSCI 406. Field Studies: [Topic]. 1-12 Credits.
Repeatable.

DSCI 407. Seminar: [Topic]. 1-5 Credits.
Repeatable.

DSCI 409. Terminal Project. 1-12 Credits.
Repeatable.

DSCI 410. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.

DSCI 411. Capstone Project. 4 Credits.
This course for Data Science majors provides a student the opportunity to apply the theoretical knowledge and techniques acquired during the Data Science degree curriculum to a project involving real data from the student's domain of specialization. Requires an average 3.75 GPA in courses required.
Prereq: DSCI 311, DSCI 372M, PHIL 223.

DSCI 610. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.