# CSUF Data Science Minor

#### Data Science Introduction (choose one)

CPSC 375 Introduction to Data Science and Big Data MATH 237 Foundations of Data Science

#### **Machine Learning**

CPSC 483 Intro to Machine Learning for Data Science

## Introductory Statistics (choose one)

ISDS 361A Business Analytics I

MATH 338 Statistics Applied to Natural Sciences

PSYC 201 Introduction to Statistics in Psychology

PUBH 349 Measurement and Statistics in Health Science

Similar introductory course in Statistics

# Culminating Experience (choose one, 3 units)

495 Internship

497 Independent Research

499 Independent Research

Similar course

#### Elective (at least 3 units)

ACCT 307 Accounting Information Systems

ACCT 404 Emerging Technologies in Accounting

ACCT 407 Accounting Data Analytics

ANTH 404 Analytical Methods in Archaeology

ANTH 445 Quantitative Methods in Anthropology

BIOL 402 Computer Lab in Molecular Systematics

**BIOL 410 Evolutionary Genetics** 

BIOL 411 Medical Genetics and Systems Biology

BIOL 473 Introduction to Bioinformatics

CPSC 332 File Structures and Database Systems

CPSC 454 Cloud Computing and Security

CPSC 474 Parallel and Distributed Computing

CPSC 479 Introduction to High Performance Computing

CPSC 485 Computational Bioinformatics

### Elective (cont.)

ECON 305 Economics, Causality, and Analytics

ECON 340 Economic Research Methods

ECON 440 Introduction to Econometrics

EGME 424 Data Acquisition and Instrumentation

FIN 478 Data Analytics for Risk and Insurance

GEOG 489 Digital Image Processing

GEOL 381 Data Collection and Analysis for Earth Scientists

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m HUSR}$  315 Research and Data Management in Human Services

ISDS 373 Python for Business Analytics

ISDS 402 Database Management Systems

ISDS 415 Principles of Business Intelligence

ISDS 442 Business Modeling Using Spreadsheets

ISDS 462 Applied Business Regression Analysis

ISDS 474 Data Mining for Managers

ISDS 477 Applied Business Forecasting

ISDS 478 Data Analytics for Risk and Insurance

KNES 349 Measurement and Statistics in Kinesiology

MATH 335 Mathematical Probability

MATH 435 Mathematical Statistics

MATH 337 Introduction to Computational Statistics

MATH 437 Modern Approaches to Data Analysis

MATH 439 Intermediate Data Analysis

MKTG 443 Marketing Analytics Decision Making in the Information Age

MKTG 444 Social Media Marketing and Analytics

POSC 407 Polls, Statistics and Political Interpretation

PSYC 466 Computer Applications for Psychological Research

PUBH 201 Introduction to Public Health

PUBH 349 Measurement and Statistics in Health Science

PUBH 349L Applied Measurement and Statistics in Health Science (1 unit)

PUBH 401 Epidemiology

SOCI 302 Social Research Methods

SOCI 303 Statistics for the Social Sciences