

BS in Data Science

Freshman Year

Sophomore Year

Junior Year

Senior Year

Semester 1

Semester 2

Semester 1

Semester 2

Semester 1

Semester 2

Semester 1

Semester 2

Florida Poly Experience Sequence

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| | EGN 1006 Career Design for STEM Disciplines (1) | EGN 1007 Concepts and Methods for Eng. & CS (1) | COP 2073 Foundations of Data Analytics (3) | ISC 2310 Python for Data Analytics (3) | STA 3036 Probability and Statistics 2 for Business, Data Science, and Economics (3) | QMB 4690 Process Design Using Lean Sigma (2) | IDC 4942 Data Analytics Capstone 1 (3) | IDC 4943 Data Analytics Capstone 2 (3) |
| | IDS 1380 Foundational Lessons in Applications of MathEmatics (3) | IDS 1721 Computing & Problem Solving in STEM (3) | COP 3337 Object Oriented Programming 1 (3) | COP 3710 Database 1 (3) | CTS 2375 Cloud Infrastructure and Services (3) | EGN 3448 Operations Research (3) | CAP 4770 Data Mining & Text Mining (3) | CAP 4793 Advanced Data Science |
| IB or C in MAC 1147 or higher, AP for MAC 2311 | MAC 2311 Analytic Geometry and Calculus 1 (4) | MAC 2312 Analytic Geometry and Calculus 2 (4) | STA 2023 Statistics 1 (3) | MAS 3114 Computational Linear Algebra (3) | COP 3530 Data Structures & Algorithms (3) | STA 3241 Statistical Learning (3) | ECO 4422 Econometrics: Casual Inference, Panel & Survey Data (3) | Any Arts & Humanities or Social Science Course (3) |
| | CHM 2045 Chemistry 1 (3) | PHY 2048 Physics 1 (3) | PHY 2049 or CHM 2046 or EVR 1001 (3) | MAD 2104 Discrete Mathematics (3) | IDC 3180 Contemporary Issues & Case Studies in Data Science (3) | STA 4853 Time Series Analysis (3) | CAP 4612 Machine Learning (3) | Data Science Elective or Application Course |
| | CHM 2045L Chemistry 1 Lab (1) | PHY 2048L Physics 1 Lab (1) | PHY 2049L or CHM 2046L or EVR 1001L (1) | ECO 2023 Principles of Microeconomics (3,W) | Data Science Elective or Application Course | CAP 4786 Topics in Big Data Analytics (3) | Arts & Humanities Required List Course (3) | Data Science Elective or Application Course |
| | ENC 1101 English Composition 1 (3,W) | ENC 2210 Technical Writing (3,W) | Social Science Required List Course (3) | | IDS 4941 Professional Exp. Internship (0) | → | | |

Legend:

Course Prefix & Number | Credits | Course Name

General Education Elective | Credits

Program or Concentration Elective | Credits

C grade or better is required

Application Area Electives

Choose six credits from the list below.

- **ECP 3004 - Contemporary Economic Issues Credits: 3**
- **MAR 4705 - Marketing Analytics Credits: 3**
- **ESI 4011 - Data Analytics for Smart City & Transportation Credits: 3**
- **FIN 4501 - Investment, Financial Modeling and Analytics Credits: 3**

Data Science Program Electives

Choose three credits from the list below or from available concentration courses.

- CAI 4304 - Natural Language Processing Credits: 3
- CAP 4410 - Computer Vision Credits: 3
- CAP 4630 - Artificial Intelligence Credits: 3
- CAP 4613 - Applied Deep Learning Credits: 3
- ENT 2112 - Entrepreneurial Opportunity Analysis Credits: 3
- ECP 4031 - Benefit Cost Analysis Credits: 3
- EGS 3625 - Engineering & Technology Project Management Credits: 3
- ECO 4400 - Game Theory and Strategic Decisions Credits: 3
- CEN 4721 - Human Computer Interaction Credits: 3
- COP 4520 - Introduction to Parallel and Distributed Computing Credits: 3
- CEN 4033 - Secure Software Engineering Credits: 3
- CNT 4403 - Data Security Credits: 3

Arts, Humanities, and Social Sciences

Arts & Humanities

A total of 12 credit hours must be completed in the arts, humanities, and social sciences. Three to six credits, as noted below, must be taken in Art and Humanities.

At least one course (3 credits) from the following state required list:

- ARH 2000 - Art Appreciation Credits: 3
- LIT 2000 - Introduction to Literature Credits: 3
- HUM 2020 - Introduction to the Humanities Credits: 3
- PHI 2010 - Introduction to Philosophy Credits: 3
- MUL 2010 - Music Appreciation Credits: 3

Optional additional course elective:

- IDS 2144 - Legal, Ethical, and Management Issues in Technology Credits: 3
- HUM 2022 - Explorations in the Humanities Credits: 3

Social Sciences

A total of 12 credit hours must be completed in the arts, humanities, and social sciences. Six to nine credits, as noted below, must be taken in Social Sciences.

Required for DS majors:

- ECO 2023 - Principles of Microeconomics Credits: 3

At least one course (3 credits) from the following state required list:

- AMH 2010 - American History to 1877 Credits: 3
- AMH 2020 - American History Since 1877 Credits: 3
- ECO 2013 - Principles of Macroeconomics Credits: 3
- POS 2041 - American Government Credits: 3
- PSY 2012 - General Psychology Credits: 3