BS in Data Science

2025-2026 Catalog

Freshman Year		Sophomore Year		Junior Year		Senior Year	
Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2	Semester 1	Semester 2
COP 2073 Foundations of Data Analytics (3)	STA 2023 Statistics 1 (3)	ISC 2310 Python for Data Analytics (3)	COP 3710 Database 1 (3)	CTS 2375 Cloud Infrastructure and Services (3)	EGN 3448 Operations Research (3)	IDC 4942 Data Analytics Capstone 1 (3)	IDC 4943 Data Analytics Capstone 2 (3)
ENC 1101 English Composition 1 (3,W)	COP 2271 Introduction to Computation and Programming (3)	COP 3337 Object Oriented Programming 1 (3)	ECO 2023 Principles of Microeconomics (3,W)	IDC 3180 Contemporary Issues & Case Studies in Data Science (3)	STA 3241 Statistical Learning (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 3036 Probability and Statistics 2 for Business, DS, and Economics (3)	MAS 3114 Computational Linear Algebra (3)	COP 3530 Data Structures & Algorithms (3)	STA 4853 Time Series Analysis (3)	ECO 4422 Econometrics: Casual Inference, Panel & Survey Data (3)
Natural Science Elective (3)	Social Science Required List Course (3)	General Education Elective (3)	MAD 2104 Discrete Mathematics (3)	General Elective (3)	CAP 4786 Topics in Big Data Analytics (3)	CAP 4612 Machine Learning (3)	QMB 4690 Process Design Using Lean Sigma (2)
Natural Science Elective Lab (1)	ENC 2210 Technical Writing (3,W)	Arts & Humanities Required List Course (3)	General Education Elective (3)	Application Course (3)	General Education Elective (3)	General Elective (3)	General Elective (4)
				IDS 4941 Professional Exp. Internship (0)			Application Course (3)

Legend:

- Course Prefix & Number | Credits | Course Name
- General Education Elective | Credits
- Program or Concentration Elective | Credits
- General Elective (3)

C grade or better is required

FLORIDAPOLY

Last Modified 03/20/2025

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**

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.

Atleast 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

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

General Electives

Any 1000 level or above course may fulfill this requirement.

Recommended Data Science 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