B.S. in Data Science

General Education Requirements

For a full description of Embry-Riddle General Education guidelines, please see the General Education section of this catalog. These minimum requirements are applicable to all degree programs.

Communication Theory & Skills (COM 122, COM 219, COM 221)	9
Humanities - Lower level	3
Social Sciences - Lower level	3
Humanities or Social Sciences - Lower or Upper level	3
Humanities or Social Sciences - Upper level	3
Computer Science (CS 223 or EGR 115)	3
Mathematics (MA 241 & MA 242)	8
Physical and Life Sciences - one course must include a lab	7
Total Credits	**39**

Data Science Degree Requirements

UNIV 101	College Success	1
Data Science Core		
CS 222	Introduction to Discrete Structures	3
CS 225	Computer Science II	4
CS 315	Data Structures and Analysis of Algorithms	3
CS 317	Files and Database Systems	3
DS 444	Scientific Visualization	3
DS 490	Data Science Capstone	3
MA 243	Calculus and Analytical Geometry III	4
MA 412	Probability and Statistics	3
MA 413	Statistics	3
MA 432	Linear Algebra	3
Applied Data Science Concentration		
DS 390	Research Project in Industrial Mathematics	3
DS 440	Data Mining	3
MA 210	Introduction to Data Science	3
MA 305	Introduction to Scientific Computing	3
MA 360	Mathematical Modeling & Simulation I	3
MA 453	High Performance Scientific Computing	3
Electives		**15**
All students must declare and complete any Minor/Two Degrees of the Same Rank/Double Major (ROTC courses are acceptable)		
Any-Level Open Electives		**9**
Upper-Level Open Electives		**6**
Total Credits		**81**
Total Degree Credits		**120**