

ARTIFICIAL INTELLIGENCE AND DATA ENGINEERING,BS

Requirements

Minimum hours required to complete program 128 CH

Code	Title	Hours
FRESHMAN YEAR (Fall Semester)		
AIEN 111	Introduction to Computing Hardware	3
MATH 161	Engineering Mathematics I	4
ENGR 110	Introduction to Programming	3
ENGL 114	Composition and Rhetoric	3
University Core Curriculum (UCC)		3
FRESHMAN YEAR (Spring Semester)		
PHYS 216	Newtonian Mechanics for Engineering and Science	3
PHYS 226	Experimental Physics and Engineering Laboratory I: Mechanics	1
MATH 162	Engineering Mathematics II	4
CPEN 127	Concepts of Mathematics	3
AIEN 120	Introduction to Artificial Intelligence	3
University Core Curriculum (UCC)		3
SOPHOMORE YEAR (Fall Semester)		
PHYS 217	Electricity and Magnetism for Engineering and Science	3
PHYS 227	Experimental Physics and Engineering Laboratory II: Electricity and Magnetism	1
MATH 261	Engineering Mathematics III	3
CPEN 151	Fundamentals of Programming and Computer Science	4
AIEN 217	Probability and Statistical Methods	3
SOPHOMORE YEAR (Spring Semester)		
MATH 318	Differential Equations	3
MATH 321	Topics in Applied Mathematics	3
AIEN 214	Electronics for Data Scientists	4
CPEN 152	Principles of Imperative Computing	3
University Core Curriculum (UCC)		3
ENGR 210	Introduction to Innovations and Technology Entrepreneurship	1
JUNIOR YEAR (Fall Semester)		
AIEN 310	Machine Learning Fundamentals	4
AIEN 320	Data Modeling and Optimization	3
AIEN 330	Data Engineering and Visualization	4
CPEN 314	Signals and Systems	3
ENGL 220	Technical Writing	3
JUNIOR YEAR (Spring Semester)		
AIEN 340	Applied AI: A Hands-on Approach	3
AIEN 350	Deep Learning	4
AIEN 360	Embedded AI	4
CPEN 330	Data Structures	3
University Core Curriculum (UCC)		3
JUNIOR YEAR (Summer Semester)		
AIEN 410	Senior Design Project I	
AIEN 391	Professional Experience	0

SENIOR YEAR (Fall Semester)		
University Core Curriculum (UCC)		3
ENGR 482	Engineering Ethics	3
Technical Area Elective		3
Technical Area Elective		3
Technical Area Elective		3
SENIOR YEAR (Spring Semester)		
AIEN 411	Senior Design Project II	3
Technical Area Elective		3
Technical Area Elective		3
University Core Curriculum (UCC)		3
University Core Curriculum (UCC)		3
Total Hours		128