

Attachment A: Bachelor of Science in Data Science---Associate in Mathematics

Joliet Junior College total credits = 89, Lewis University total credits = 33 (TOTAL=122)

First Semester	Hours	Second Semester	Hours
STAT 101 Introduction to Data Science	3	ENG 102 Rhetoric II	3
MATH 128 Elementary Statistics	4	MATH 139 Pre-Calculus II or MATH 142 Accelerated Trigonometry/Pre-Calculus	4 – 5
ENG 101 Rhetoric	3	Humanities & Fine Arts	3
CIS 135 Computer Programming	4	CIS 261 Java Programming	4
		Physical or Life Science	4
Total Hours	14		18 – 19

Third Semester	Hours	Fourth Semester	Hours
Social & Behavioral Sciences	3	MATH 170 Calculus with Analytic Geometry I	5
MATH 137 Discrete Mathematics	4	STAT 229 Statistical Programming	3
STAT 228 Advanced Statistics	3	Social & Behavioral Sciences	3
Humanities & Fine Arts	3	Humanities & Fine Arts*	3
CIS 269 Data Structures	4	Physical or Life Science	3
Total Hours	17		17

Fifth Semester	Hours	Sixth Semester	Hours
MATH 171 Calculus with Analytic Geometry II	4	MATH 172 Calculus with Analytic Geometry III	4
Social & Behavioral Sciences	3	STAT 230 Data Visualization	3
General education elective	3	General education elective	3
COMM 101 Principles of Speech Communication	3	<i>DATA 23500 Programming for Data Analysis</i>	3
Total Hours	13		13

Seventh Semester	Hours	Eighth Semester	Hours
<i>THEO 10000 Search for Faith</i>	3	<i>SOCI 29000 Diversity and Social Justice</i>	3
<i>CPSC 33000 Database Systems</i>	3	<i>DATA 400000 Big Data Systems</i>	3
<i>DATA 30000 Visualizing and Communicating Data Knowledge</i>	3	<i>DATA 47200 Introduction to Data Mining</i>	3
<i>DATA 47100 Machine Learning</i>	3	<i>CPSC 47000 Artificial Intelligences OR OTHER CONCENTRATION ELECTIVE</i>	
<i>MATH 36500 Mathematical Modeling or OTHER CONCENTRATION ELECTIVE</i>	3	<i>DATA 49000 Data Science Undergraduate Capstone Project</i>	3
Total Hours	15		15

*** Two different disciplines**

Courses listed in italics are Lewis courses; all other courses are JJC courses.