

**Appendix A – Transfer Guide/Program Articulation**

<b>Sending Institution:</b>	Joliet Junior College	<b>Receiving Institution:</b>	Lewis University
<b>Degree:</b>	AS in Mathematics	<b>Degree:</b>	Bachelor of Science
<b>Department:</b>	Mathematics	<b>Department:</b>	Engineering, Computer and Mathematical Sciences
<b>JJC Program Code:</b>	TR 200	<b>Program:</b>	Data Science

**Attachment A: Lewis University BS in Data Science**

**Joliet Junior College total credits = 94, Lewis University total credits = 33 (TOTAL=130)**

First Semester	Hours	Second Semester	Hours
<a href="#">STAT 101 Introduction to Data Science</a>	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 Programing	4	<a href="#">CIS 261 Java Programming</a>	4
		Science Course	4
<b>Total Hours</b>	<b>14</b>		<b>18 –19</b>

Third Semester	Hours	Fourth Semester	Hours
Social & Behavioral Sciences	3	MATH 170 Calculus with Analytic Geometry I	5
MATH 137 Introduction to Discrete Math	4	<a href="#">STAT 229 Statistical Programming</a>	3
<a href="#">STAT 228 Advanced Statistics</a>	3	Social & Behavioral Sciences	3
Humanities & Fine Arts	3	Humanities/Fine Arts *	3
<a href="#">CIS 269 Data Structures</a>	4	Physical or Life Science	3
<b>Total Hours</b>	<b>17</b>		<b>17</b>

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	<a href="#">STAT 230 Data Visualization</a>	3
ECON 103 Principles of Economics 1	3	MATH 210 Linear Algebra	3
COMM 101 Principles of Speech Communication	3	Physical or Life Sciences with Lab	5
PHIL 103 Introduction to Ethics	3	<i>DATA 23500 Programming for Data Analysis</i>	3
<b>Total Hours</b>	<b>16</b>		<b>18</b>

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 40000 Big Data Systems</i>	3
<i>DATA 30000 Visualizing and Communicating Data Knowledge</i>		<i>DATA 47200 Introduction to Data Mining</i>	3
<i>DATA 47100 Machine Learning</i>	3	<i>CPSC 47000 Artificial Intelligence OR OTHER CONCENTRATION ELECTIVE</i>	3
<i>MATH 36500 Mathematical Modeling OR OTHER CONCENTRATION ELECTIVE</i>	3	<i>DATA 49000 Data Science Undergraduate Capstone Project</i>	3
<b>Total Hours</b>	<b>15</b>		<b>15</b>

**\* Two different disciplines**

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

**[Blue courses are new JJC courses](#)**