JOLIET JUNIOR COLLEGE 1901

DATA COURSES
at JJC

A working knowledge of statistics is key to many careers in medicine, genetics, business, public policy and other fields.

By studying statistics, students can build the foundation they need to make informed decisions and extract information from data.

STAT 101: Introduction to Data Science

This is an introductory course to the field of data science and roles of a data scientist. Topics will include: history of data science, ethics, available tools, methodology, visualization and pathways to data science careers. This course will expose students to applications in various fields and prepare them to be critical thinkers of future career paths. An introduction to R is included.
PreReq: department permission

STAT 229: Statistical Programming

This course will use a statistical programming language to perform effective data analysis. Students will acquire statistical programming skills including reading data, accessing statistical packages, writing functions, debugging, profiling code, organizing code and commenting code.
PreReq: department permission

STAT 228: Advanced Statistics

A second course in statistics, focusing on advanced topics including: data manipulation, variable creation and transformations; multiple regression; nonlinear regression; ANOVA; and non-parametric statistics. This course uses a statistical software package such as R or other equivalent programs.
PreReq: Math128 or equivalent

STAT 230: Data Visualization

This course will introduce students to the field of data preparation and visualization including design and hands-on experience. Students will learn how to collect, transform, curate and analyze datasets. The course will introduce students to design and build principles for telling stories for effective communications to facilitate data-driven decision-making and provide insights.
PreReq: department permission

Email DataScience@jjc.edu for questions or help registering!

All courses are 3 credits and transfer as direct course equivalency or general course equivalency credit to 4-year institutions.
Learn more about JJC's 3+1 partnership with Lewis University at jjc.edu/choose-your-path/stem/mathematics

Data Science Transfer Guide

From JJC to Lewis University

Degree Pathway:
JJC Degree: AS in Mathematics
Lewis University Degree:
Bachelor of Science in Data Science

Total Credits:
JJC: 95 credits
Lewis University: 33 credits
Total: 128 credits

First Semester
STAT	101 Introduction to Data Science	
MATH	128 Elementary Statistics	
ENG	101 Rhetoric	
CIS	135 Computer Programming, Science Course	
Total Semester Credit Hours		**15**

Second Semester
ENG	102 Rhetoric II	
MATH	139 Pre-Calculus II	
Humanities/Fine Arts		
CIS	261 Java Programming	
Total Semester Credit Hours		**15**

Third Semester
Social & Behavioral Sciences		
MATH	137 Introduction to Discrete Math	
STAT	228 Advanced Statistics	
Humanities/Fine Arts		
CIS	269 Data Structures	
Total Semester Credit Hours		**17**

Fourth Semester
MATH	170 Calculus with Analytic Geometry I	
STAT	229 Statistical Programming	
Social & Behavioral Sciences		
Humanities/Fine Arts		
Physical or Life Science		
Total Semester Credit Hours		**17**

Fifth Semester
MATH	171 Calculus with Analytic Geometry II	
Social & Behavioral Sciences		
ECON	103 Principles of Economics I	
COMM	101 Principles of Speech Communication	
PHIL	103 Introduction to Ethics	
Total Semester Credit Hours		**16**

Sixth Semester
MATH	172 Calculus with Analytic Geometry III	
STAT	230 Data Visualization	
MATH	210 Linear Algebra	
Physical or Life Sciences with Lab		
DATA	23500 Programming for Data Analysis	
Total Semester Credit Hours		**18**

Seventh Semester (at Lewis)
THEO	*10000 Search for Faith*	
CPSC	*33000 Database Systems*	
DATA	*30000 Visualizing and Communicating Data Knowledge*	
DATA	*47100 Machine Learning*	
MATH	36500 Mathematical Modeling or Other Concentration Elective	
Total Semester Credit Hours		**15**

Eighth Semester (at Lewis)
SOCI	*29000 Diversity and Social Justice*	
DATA	*40000 Big Data Systems*	
DATA	*47200 Introduction to Data Mining*	
CPSC	*47000 Artificial Intelligence*	
DATA	*49000 Data Science Undergraduate Capstone Project*	
Total Semester Credit Hours		**15**

Two different disciplines are required for Humanities/Fine Arts.

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