DATA SCIENCE, B.S. TO ARTIFICIAL INTELLIGENCE, M.S. ACCELERATED PROGRAM

Saint Louis University's data science, B.S., to artificial intelligence, M.S., accelerated program allows a student to complete both the Bachelor of Science in Data Science and the Master of Science in Artificial Intelligence at SLU in a shorter time period than if both degrees were pursued independently.

For additional information, see the catalog entries for the following programs:

Data Science, B.S. (https://catalog.slu.edu/colleges-schools/arts-sciences/interdisciplinary/data-science-bs/)

Artificial Intelligence, M.S. (https://catalog.slu.edu/colleges-schools/science-engineering/computer-science/artificial-intelligence-ms/)

Requirements

Students who want to apply to this accelerated program should have completed all 2000-level coursework required of the data science bachelor's program and have completed at least 75 credits at the time of application.

At the time of application, students must have a cumulative GPA of at least 3.00 and a GPA of at least 3.00 in their computer science coursework. Contact the graduate coordinator for more details.

Non-Course Requirements

All School of Science and Engineering B.A. and B.S. students must complete an exit interview/survey near the end of their bachelor's program.

Continuation Standards

Students must maintain a cumulative GPA of at least 3.00 and a GPA of at least 3.00 in their computer science coursework.

Students who drop below that GPA while in the accelerated program will be placed on a one-semester probationary period before being dismissed from the accelerated program.

Only grades of "B" or better in the graduate courses taken while an undergraduate can be applied to the master's degree.

Roadmap

This roadmap is just one example of a semester-by-semester plan of study for this program. There are other plans students can and do take. The plan of study for each particular student is established in consultation with each student's academic advisor; *this roadmap does not replace academic advising appointments.*

Roadmap notes:

- This Roadmap assumes full-time enrollment unless otherwise noted.
- Courses/Milestones marked with an "!" are critical and must be completed in the semester listed in the Roadmap to ensure a timely graduation.
- Course availability and sequencing are subject to change.

Course	Title	Credits
Year One		
Fall		
CSCI 1070	Introduction to Computer Science: Taming Big Data	3
MATH 1660	Discrete Mathematics	3
MATH 1510	Calculus I	4
CORE 1000	Ignite First Year Seminar	2
CORE 1500	Cura Personalis 1: Self in Community	1
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication	3
	Credits	**16**
Spring		
CSCI 1300	Introduction to Object-Oriented Programming	4
MATH 1520	Calculus II	4
DATA 1800	Data Science Practicum I	1
CORE 1600	Ultimate Questions: Theology	3
General Electives		3
	Credits	**15**
Year Two		
Fall		
CSCI 2100	Data Structures	4
MATH 2530	Calculus III	4
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
CORE 1700	Ultimate Questions: Philosophy	3
	Credits	**14**
Spring		
STAT 3850	Foundation of Statistics	3
DATA 2800	Data Science Practicum II	1
CSCI 2300	Object-Oriented Software Design	3
MATH 3110	Applied Linear Algebra	3
CORE 2500	Cura Personalis 2: Self in Contemplation	0
CORE 3800	Ways of Thinking: Natural and Applied Sciences	3
General Electives		3
	Credits	**16**
Year Three		
Fall		
CSCI 3710	Databases	3
STAT 4880	Bayesian Statistics and Statistical Computing	3
CORE 2800	Eloquentia Perfecta 3: Creative Expression	3
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
General Electives		3
	Credits	**15**

Spring		
STAT 5087	Applied Regression (❗ Double-counted undergrad/grad)	3
CSCI/ STAT Elective		3
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
General Electives		6
	Credits	**15**
Year Four		
Fall		
CSCI 4961	Capstone Project I	2
CSCI 5740	Introduction to Artificial Intelligence (❗ Only counts toward graduate degree)	3
CSCI 5750	Introduction to Machine Learning	3
General Electives		6
	Credits	**14**
Spring		
DATA 4962	Capstone Project II	2
STAT 5xxx Elective (Double-counted undergrad/grad)		3
Artificial Intelligence Principles course (Double-counted undergrad/grad)		3
General Electives		9
	Credits	**17**
Year Five		
Fall		
CSCI 5030	Principles of Software Development	3
CSCI 5050	Computing and Society (❗ See program notes)	3
Artificial Intelligence Applications Course		3
	Credits	**9**
Spring		
CSCI 5961	Artificial Intelligence Capstone Project	3
Artificial Intelligence Electives		6
	Credits	**9**
	Total Credits	**140**

Program Notes

CSCI 5050 Computing and Society (3 cr) requirement will be waived for students who took Computer Ethics as an undergraduate. These hours would become an additional graduate elective.

Thesis Option

A master's thesis is optional. Students completing a thesis should take six credits of CSCI 5990 Thesis Research (0-6 cr) as part of the elective requirements.

Internship with Industry

Students may apply at most three credits of CSCI 5910 Internship with Industry (1-3 cr) toward the degree requirements.

Closely Related Disciplines

With approval, students may include up to six credits of elective graduate coursework in closely related disciplines (e.g., mathematics and statistics, bioinformatics and computational biology, electrical and computer engineering).