

HEALTH SCIENCES, B.S. TO HEALTH DATA SCIENCE, M.S. ACCELERATED PROGRAM

Saint Louis University's accelerated Bachelor of Science in Health Sciences to Master of Science in Health Data Science (M.S.) pathway is designed for students interested in using data to improve health outcomes and advance decision-making in health care.

The health sciences curriculum provides a flexible and customizable foundation that allows you to explore your interests while building core knowledge in health systems, population health, and the factors that influence patient care. Through a combination of required coursework and electives, you can develop skills in data analysis, interpretation, and application within a health care context.

This accelerated pathway gives you the opportunity to begin graduate-level coursework in health data science during your senior year, helping you save time and reduce the overall cost of earning your graduate degree. You will gain experience working with health data, understanding data-driven decision-making, and applying analytical tools to real-world health challenges.

Graduates of this pathway are prepared for roles in health care systems, public health organizations, research institutions, and health technology companies. Career opportunities include health data analyst, clinical data specialist, population health analyst, and roles in quality improvement and health informatics. The program also provides a strong foundation for continued growth in data-driven and analytical careers within the health sector.

Students apply to the accelerated program during their junior year. If accepted, you will begin taking graduate-level courses in your senior year while maintaining undergraduate status, financial aid, and tuition rates. After completing your bachelor's degree, you will transition to full graduate status, pay graduate tuition, and become eligible for graduate assistantship opportunities.

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

Health Sciences, B.S. (<https://catalog.slu.edu/colleges-schools/health-sciences/clinical-health-sciences/health-sciences-bs/>)

Health Data Science, M.S. (<https://catalog.slu.edu/colleges-schools/medicine/health-outcomes-research/health-data-science-ms/>)

Requirements

Admission Requirements

Eligibility requirements for SLU's health sciences B.S., health information management concentration to health data science, M.S. accelerated program include:

- Students must have a minimum cumulative GPA of 3.00
- Students must be in good academic and disciplinary standing with Saint Louis University and the Doisy College of Health Sciences.
- Students can declare their interest to the accelerated program to their advisor up until the sixth semester.

- No earlier than the sixth semester of collegiate study, students in the accelerated health information management concentration to M.S. health data science track submit a letter of interest to the Health Information Management Program.

Program Requirements

- In the eighth semester, students will apply to the M.S. in health data science program.
- Students will substitute designated graduate health data science courses for undergraduate health information management courses in the seventh and eighth semesters. Students can count up to 15 credits from the M.S. towards the B.S. requirements, but due to the nature of both programs, most students end up counting 9 credits from the M.S. towards the B.S.
- Accepted students will continue M.S. in health data science graduate coursework in the summer semester after graduating with a B.S. in health sciences, health information management concentration.

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		
CORE 1000	Ignite First Year Seminar	2
MATH 1200	College Algebra	3
HSCI 1000	Introduction to Health Sciences	1
BIOL 1240 & BIOL 1245	General Biology: Information Flow and Evolution and Principles of Biology I Laboratory (satisfies CORE 3800)	4
University Elective		3
		Credits
		13
Spring		
CORE 1600	Ultimate Questions: Theology	3
BIOL 1260 & BIOL 1265 or CHEM 1080 and CHEM 1085	General Biology: Transformations of Energy and Matter or Principles of Chemistry 1 Lecture and Principles of Chemistry 1 Lab	4
STAT 1300	Elementary Statistics with Computers	3
CORE 1900	Eloquentia Perfecta 1: Written and Visual Communication	3
University Elective		3
		Credits
		16

Year Two**Fall**

HSCI 2000	The US Health Care System	3
HSCI 2200	Medical Terminology	3
HIM 3000	Introduction to Health Information Concepts and Practice	3
CORE 1200	Eloquentia Perfecta 2: Oral and Visual Communication	3
CORE 1700	Ultimate Questions: Philosophy	3

Credits 15

Spring

HSCI 2100	Health Care Management	3
HSCI 2400	Professional Development Seminar	1
CORE 2800	Eloquentia Perfecta 3: Creative Expression	2-3
HSCI Elective	Health Sciences Major Elective	3
University Elective		3

Credits 12-13

Year Three**Fall**

HSCI 3200	Aspects of Health Law	3
HSCI 3700	Research Methods	3
HSCI Elective	Health Sciences Major Elective	3
CORE 3600	Ways of Thinking: Social and Behavioral Sciences	3
University Elective		3

Credits 15

Spring

HSCI 3910	Internship	1-3
HSCI Elective	Health Sciences Major Electives	6
CORE 3400	Ways of Thinking: Aesthetics, History, and Culture	3
CORE 3500	Cura Personalis 3: Self in the World	1
University Elective		3

Credits 14-16

Year Four**Fall**

HSCI 4100	Healthcare Technology and Informatics	3
HSCI Elective	Health Sciences Major Elective	3
CORE	Equity and Global Identities: Identities in Context	3
HDS 5000	Foundations in Health Data Science	3
ORES 5300	Foundations of Health Outcomes Research	3

Credits 15

Spring

HSCI 4500	Hot Topics in Health Care	3
HSCI Elective	Health Sciences Major Elective	3
HDS 5130	Healthcare Organization, Management, and Policy	3
ORES 5160	Data Management and Programming in Healthcare	3
University Elective		3

Credits 15

Year Five**Fall**

HDS 5310	Analytics, Statistics & Visualization Methods in Health Data Science	3
HDS 5330	Predictive Modeling and Health Machine Learning	3

Credits 6

Spring

HDS 5430	Image Processing and Deep Learning Diagnostics	3
HDS 5230	High-Performance Computing and Health Artificial Intelligence	3

Credits 6

Year Six**Fall**

HDS 5530	Natural Language Processing in Medicine	3
HDS 5960	Capstone Experience	3

Credits 6

Total Credits 133-136

Contact Us

Apply for Admission (<https://www.slu.edu/admission/>)

Contact Doisy College of Health Sciences

Recruitment specialist

314-977-2570

dchs@health.slu.edu