

APPLIED AI AND DECISION ANALYTICS, M.S.

Saint Louis University's Master of Science in Applied AI and Decision Analytics is an innovative, future-oriented graduate program that prepares students to solve real-world business challenges using advanced analytics, artificial intelligence, and data-driven decision tools. Designed with inclusivity at its core, this program welcomes applicants from a wide variety of academic and professional backgrounds.

No prior STEM degree is required. All foundational technical knowledge and skills will be taught within the curriculum. The SLU program blends technical depth, creative problem-solving, and leadership strategy, equipping graduates to build, implement, and lead AI-powered solutions for complex organizational decisions.

Through hands-on coursework and a capstone project focused on the deployment and validation of real-world AI applications, graduates leave with practical experience and a portfolio-ready demonstration of their ability to drive innovation across industries.

Along the way, you'll learn from a network of diverse peers from around the world, merging technology with human and organizational structures as you engage in knowledge discovery, management and dissemination of industry-critical knowledge.

You can also earn a graduate certificate that complements a master's degree, often without taking additional credits, allowing you to tailor the program to your specific interests.

As part of the School for Professional Studies, this 30-credit master's program offers data-driven professionals like you a flexible option to meet your career goals. With multiple start terms, you can begin the master's program in the fall or spring. You will join a community of academics and practitioners from a wide range of subjects and professional backgrounds, providing the opportunity to learn from a network of peers.

The 100% online program offers flexible courses in eight-week terms, making advanced education more accessible for working professionals.

Some SPS programs are also offered in on-campus versions, created so that international students can meet their visa requirements.

Faculty

As a student in the School for Professional Studies at Saint Louis University, you'll learn from exceptional faculty who are leading experts in their fields. They bring real-world knowledge to the classroom and are dedicated to your professional success. Learn more about the SPS faculty (<https://www.slu.edu/professional-studies/contact-us/faculty/>).

Careers

Potential job titles: decision scientist, data scientist, quantitative analyst, machine learning engineer, MLOps engineer, data engineer, AI product manager, AI solutions architect, AI/decision science consultant, AI governance/policy analyst, AI explainability specialist, AI QA / model validation.

Tuition

Tuition	Total Program Cost
On-Ground MS Applied AI and Decision Analytics, MS Cybersecurity, MS Information Systems and Emerging Technologies, MS Project Management, MS Technology Leadership	\$42,000

Tuition	Cost Per Credit
Online Graduate Degrees and Post-Baccalaureate Certificates	\$810

Additional charges may apply. Other resources are listed below:

Information on Tuition and Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition/>)

Miscellaneous Fees (<https://catalog.slu.edu/academic-policies/student-financial-services/fees/>)

Information on Summer Tuition (<https://catalog.slu.edu/academic-policies/student-financial-services/tuition-summer-current/>)

Scholarships and Financial Aid

For priority consideration for graduate assistantship, apply by Feb. 1.

For more information, visit the Office of Student Financial Services (<https://www.slu.edu/financial-aid/>).

Learning Outcomes

1. Graduates will be able to employ research methodologies appropriate for the field of applied AI and analytics.
2. Graduates will be able to apply program-specific knowledge to address practical problems using an ethical, evidence-based framework.
3. Graduates will be able to implement AI and analytics systems that facilitate context-appropriate decision-making.
4. Graduates will be able to utilize argumentation skills appropriate for a given problem or context.

Requirements

Admission Requirements

- Completed application
- Undergraduate degree (most successful applicants have an undergraduate grade point average of 3.0 or better)
- Official transcript from a degree-granting institution
- Resume or curriculum vitae
- External reference recommendations (encouraged but not required)

Upon admission, a new online student* must successfully complete a virtual meeting with their academic coach to be enrolled in first-term coursework.

* This is for 100% online students only. International on-campus graduate students will meet their academic coach at on-campus orientation.

Requirements for International Students

All admission policies and requirements for domestic students apply to international students, along with the following:

- Applicants must demonstrate English language proficiency. Some examples of demonstrated English language proficiency include minimum score requirements for the following standardized tests:
 - Paper-based TOEFL: 550
 - Internet-based TOEFL: 80
 - IELTS: 6.5
 - PTE: 54
- Academic records, in English translation, of students who have undertaken postsecondary studies outside the United States must include the courses taken and/or lectures attended, practical laboratory work, the maximum and minimum grades attainable, the grades earned or the results of all end-of-term examinations, and any honors or degrees received. WES and ECE transcripts are accepted.

Apply Now (<https://www.slu.edu/apply.php>)

Program Requirements

Code	Title	Credits
Graduate Core Courses		6
AA 5221	Applied Analytics & Methods I [†]	
ORLD 5050	Ethical, Evidence-Based Decision Making	
Foundation Courses		12
AA 5050	Programming & Problem Solving	
AA 5000	Foundations of Analytics	
AA 5011	Foundations of Applied Artificial Intelligence & Machine Learning	
AA 5110	Data Infrastructure Engineering and Management [‡]	
Electives		9
Three courses, 9 credits, of electives can be taken from the following courses. Other courses whose learning objectives align with those of the MS Applied Artificial Intelligence and Decision Analytics program may also count as electives, subject to approval by the program director.		
AA 5310	Predictive Causality & Forecasting Analytics	
AA 5751	AI and Analytics Product Design	
AA 5760	AI Integration Strategy and Implementation	
AA 5800	Simulation and Modeling	
ORLD 5700	Advanced Evidence-Based Decision Making	
Master's Project		3
AA 5960	Masters Research Project	
Total Credits		30

[†] Former business students may substitute OPM 5020 Applied Business Statistics (3 cr) for AA 5221 Applied Analytics & Methods I (3 cr)

[‡] Former computer science students may substitute CSCI 5710 Databases (3 cr) for AA 5110 Data Infrastructure Engineering and Management (3 cr) and former business students may substitute ITM 6550 Big Data in Organizations (3 cr) for AA 5110 Data Infrastructure Engineering and Management (3 cr).

Academic Standing

Saint Louis University has undergraduate and graduate standards regarding a student's Academic Standing. Students are responsible for understanding the Academic Standing policy (<https://catalog.slu.edu/academic-policies/academic-policies-procedures/academic-standing-undergraduate/>).

Code	Title	Credits
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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.

Students are recommended to take all required courses before beginning electives.

Fall Start

Course	Title	Credits
Year One		
Fall		
AA 5050	Programming & Problem Solving	3
Fall 1		
AA 5221	Applied Analytics & Methods I	3
Fall 2		
AA 5000	Foundations of Analytics	3
		Credits
		9
Spring		
Spring 1		
AA 5011	Foundations of Applied Artificial Intelligence & Machine Learning	3
Spring 2		
ORLD 5050	Ethical, Evidence-Based Decision Making	3
AA 5110	Data Infrastructure Engineering and Management	3
		Credits
		9
Summer		
Elective (could be pushed to Year 2 Fall semester)		
		Credits
		3

Year Two

Fall

Fall 1

Elective	3
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Fall 2

Elective	3
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Credits	6
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Spring

AA 5960	Masters Research Project	3
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Credits	3
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Total Credits	30
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Spring Start

Course	Title	Credits
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Year One

Spring

AA 5050	Programming & Problem Solving	3
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Spring 1

AA 5221	Applied Analytics & Methods I	3
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Spring 2

AA 5000	Foundations of Analytics	3
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Credits	9
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Fall

Fall 1

AA 5011	Foundations of Applied Artificial Intelligence & Machine Learning	3
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Fall 2

AA 5110	Data Infrastructure Engineering and Management	3
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ORLD 5050	Ethical, Evidence-Based Decision Making	3
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Credits	9
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Year Two

Spring

Spring 1

Elective	3
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Spring 2

Electives	6
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Credits	9
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Fall

AA 5960	Masters Research Project	3
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Credits	3
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Total Credits	30
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Contact Us

Apply for Admission (<https://www.slu.edu/professional-studies/becoming-a-student/>)

For additional admission questions, please call 314-977-2330 or email sps@slu.edu.