ARTIFICIAL INTELLIGENCE IN MEDICINE, POST-BACCALAUREATE CERTIFICATE

The artificial intelligence in medicine, post-baccalaureate certificate is designed for clinicians, health care providers and working professionals who seek to understand, evaluate, and responsibly apply artificial intelligence in clinical and health care settings. Offered fully online or in person, the Saint Louis University certificate is intentionally structured for learners without a background in computer science or advanced mathematics, emphasizing practical application and clinical relevance rather than coding or algorithm development.

Housed within the SLU School of Medicine, the certificate is uniquely positioned to prepare health care professionals to engage with AI as a clinical tool rather than a purely technical innovation. Medical education provides the essential clinical context, patient-centered perspective, and interdisciplinary expertise needed to assess where and how AI can meaningfully improve diagnostics, imaging, therapeutics, workflow efficiency and population health. Effective use of AI in medicine requires an understanding of disease processes, care pathways, patient safety and ethical implications — competencies that are best cultivated within a medical school environment.

Curriculum Overview

The curriculum focuses on interpreting AI outputs, evaluating risks and benefits, integrating AI tools into clinical workflows, and ensuring that emerging technologies support equitable, high-quality care. Learning is reinforced through clinically grounded case studies and applied projects that address real-world health care challenges. Faculty expertise, access to clinical insights, and established research and health care partnerships further strengthen the program's applied focus.

Graduates of the certificate will be prepared to contribute meaningfully to multidisciplinary teams, guide responsible AI adoption in healthcare settings, and support evidence-based, ethically grounded decision-making. Consistent with Saint Louis University's Catholic, Jesuit mission, the program emphasizes ethical leadership, social responsibility, and improved patient outcomes, positioning the School of Medicine as the appropriate and essential home for this certificate.

Admission Requirements

- Complete Application form
- Transcripts from most recent degree(s)
- Résumé or curriculum vitae
- GRE not Required

Tuition

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/)

Learning Outcomes

1. Apply foundational artificial intelligence and machine learning concepts to understand, evaluate, and communicate the capabilities, limitations, and ethical implications of AI applications in medical and clinical contexts.
2. Evaluate and apply AI-driven methods to support precision medicine, diagnostics, and personalized care by integrating clinical, genomic and other biomedical data.
3. Assess and design AI-enabled health care solutions with attention to ethics, equity, privacy, regulatory considerations and implementation within telehealth and real-world clinical workflows.

Requirements

Code	Title	Credits
AI 5000	Introduction to Artificial Intelligence and Machine Learning	3
AIM 5530	Telehealth & Telemedicine	3
AIM 5630	AI for Precision Medicine, Genomics & Diagnostics	3
Total Credits		**9**

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		
AI 5000	Introduction to Artificial Intelligence and Machine Learning	3
AIM 5630	AI for Precision Medicine, Genomics & Diagnostics	3
AIM 5530	Telehealth & Telemedicine	3
	Credits	**9**
	Total Credits	**9**

Contact Us

For more information about this program, please call 314-977-8062 or email somanalytics@health.slu.edu (somanalytics@slu.edu).