



# Graduate Certificate in Applied AI

## INTEGRATED & APPLIED KNOWLEDGE

This innovative graduate certificate program integrates cutting-edge artificial intelligence technologies, including generative AI, with public health science to address real-world population health challenges. Students learn to analyze complex health data, build predictive models, and design intelligent systems that support evidence-based decision-making for communities and populations, including the responsible deployment of AI systems in real-world public health settings.

## EXPLORE YOUR INTERESTS

The program introduces advanced analytical methods while emphasizing the practical application of AI-driven tools in public health contexts. Learners explore how intelligent systems can improve decision-making, optimize resource allocation, and generate actionable insights across a range of population health domains.

## GAIN CAREER-READY SKILLS

Students develop in-demand skills in data analytics, predictive modeling, and AI-supported public health decision-making. Coursework also includes generative-AI assisted programming for machine learning (e.g., developing and refining code in R or Python) and designing interactive dashboards that deliver real-time health insights, preparing graduates to work effectively with modern data and technology in professional settings.

## MAKE CONNECTIONS

This program connects learners to interdisciplinary perspectives across public health, data science, and artificial intelligence. Students gain experience with tools and approaches used in government agencies, healthcare organizations, research institutions, and health-focused technology environments, including emerging AI platforms and digital health technologies used in practice.

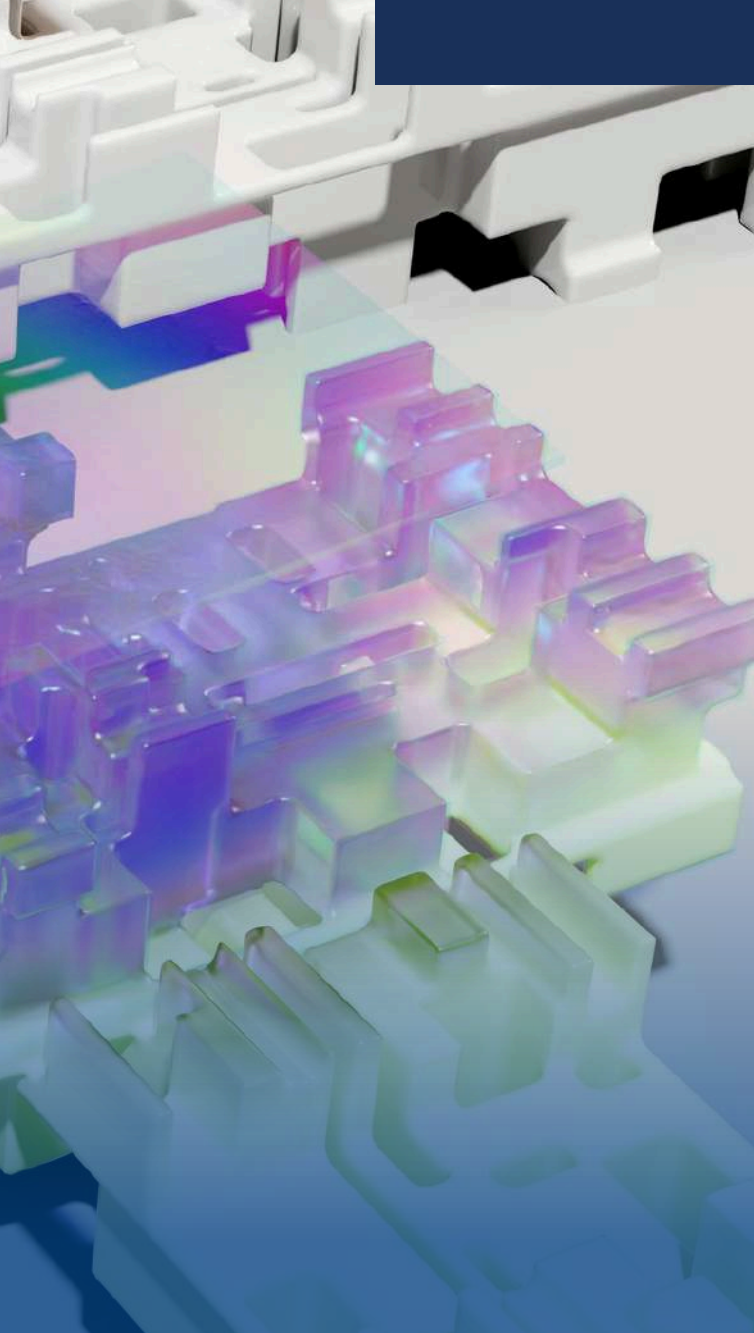
## APPLIED ARTIFICIAL INTELLIGENCE IN POPULATION HEALTH OUTCOMES

### CERTIFICATE

## 15 CREDIT HOURS

### TO APPLY:

- Completed SOPHAS application
- Undergraduate degree with minimum GPA of 3.0
- Curriculum Vitae/Resume
- Statement of Purpose (400-500 words)
- Credentials evaluation for foreign transcripts
- Language proficiency test if language of instruction was not English



## EMPLOYMENT OUTCOMES

Graduates are prepared for roles that require advanced analytical and AI-enabled public health skills—competencies that are increasingly in demand across the public and private sectors. Credits earned in this certificate may also be applied toward a master’s degree in public health at the University of Memphis School of Public Health, offering a pathway for continued academic and professional advancement.

## CURRICULUM

### COURSES (15 CREDIT HOURS)

PUBH 7180 – Foundations of Public Health (0 credit hours)

PUBH 7152 – Biostatistical Modeling and Applications

PUBH 7172 – Epidemiological Methods and Applications

PUBH 7474 – Community and Population Health Dashboards

PUBH 7652 – Large Language Models in Public Health

PUBH 7627 – AI Predictive Modeling of Health Outcomes

## CONNECT WITH OUR TEAM

**Ashish Joshi, PhD, MBBS, MPH**  
Dean and Distinguished Professor  
901.678.1673 | sphdean@memphis.edu

**Shirl Sharpe, MS**  
Manager, Academic Services  
901.678.1710  
sphadvising@memphis.edu

**Briana McNeil, MBA, M.Ed.**  
Recruitment and Admissions Coordinator  
901.678.3740  
sphadmissions@memphis.edu