

ARTIFICIAL INTELLIGENCE IN HEALTHCARE (AIHC) - CONCENTRATION

The Concentration in Artificial Intelligence in Healthcare is open to all PhD and MD-PhD students from all MCGSBS training programs to provide the opportunity to integrate Cancer coursework into their degree plan and inform their thesis research.

- David R. Holmes, III Ph.D., Program Director

Eligible learners may declare concentration using the appropriate form. See Concentration Declaration Procedure (https://nam12.safelinks.protection.outlook.com?url=https%3A%2F%2Fmayoclinic.onbaseonline.com%2Fmceidp%2Fdocpop%2Fdocpop.aspx%3FKT611_0_0_0%3DDOCCMAN14-0000016108%26clienttype%3Dhtml%26doctypeid%3D1112&data=05%7C02%7CMGSADMINASST%40mayo.edu%7C4b01df32014e498d7de808dc769263c1%7Ca25fff9c3f634fb29a8ad9bdd0321f9a%7C0%7C0%7C638515618317611354%7CUnknown%7CTWFpbGZsb3d8eyJWljiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTiI6Ikl1haWwILCJXVCi6Mn0%3D%7C0%7C%7C%7C&sdata=c1bv5o28r5CzvZREq5quqizg%2BxV6fhwQLsQBBalEIHm%3D&reserved=0). By declaring a concentration through this procedure, the concentration will appear on a student's academic transcript. Students may only declare established concentrations and must be in a degree seeking program to declare a concentration. Students may only declare one official concentration.

Course Work

The curriculum for the Concentration consists of 12-14 credits. The student must complete all of the required courses listed below:

Course Requirements

Code	Title	Hours
CTSC 5300	Foundations of Epidemiology	1
CTSC 5350	Ethical Issues in Artificial Intelligence and Information Technologies	1
AIHC 5020	Introduction to Data	3
AIHC 5030	Introduction to Deployment, Adoption & Maintenance of Artificial Intelligence Models/ Algorithms	2
AIHC 6000	Independent Study in Artificial Intelligence in Healthcare	1-3
Total Hours		8-10

Elective Courses

Students have the option to complete these courses within a given degree plan. A minimum of 2 credits from each category are required.

Code	Title	Hours
Category One:		
AIHC 5010	Introduction to Machine Learning	2-3
BME 6720	Deep Learning for Medical Imaging	
MPET 6450	Applied Data Science and Artificial Intelligence in Pharmacology	

Category Two: 2-3

AIHC 5615	Fundamentals of Statistics for Artificial Intelligence
CTSC 5610	Statistics: Linear Regression Concepts, Interpretation, and Statistical Software

Total Hours 4-6

Independent Study

The independent study is an opportunity to demonstrate the integration of knowledge from the concentration courses. Through the independent study with one of the faculty of the AIHC track, the learning will complete a project or writeup related to the use of AI in their scientific domain. The faculty and learner will meet at the beginning of the term to define the specific learning objectives and academic output from the Independent Study.