* Transforming Data to Power Human Health™*

**Certificate of Health Data Science and Artificial Intelligence**

 **Certificate Plan**

 **Effective Fall 2025**

**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Student ID: \_\_\_\_\_\_\_\_\_\_\_\_\_\_ Advisor name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Health Data Science and Artificial Intelligence Certificate Requirements**

Each student will develop a degree plan with written approval of their academic advisor. The student must file a signed degree plan each academic year in the Fall and Spring terms listing the required and/or elective courses as specified for their certificate program. This plan is a set of predefined coursework, totaling 15 credit hours.

**Using This Certificate Planner**

UTHSC-H MSBMI Required Courses:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| COURSE**NUMBER** | **TITLE** | **TYPE** | **CREDIT HOURS** | **Pre-Requisite** | **Expected** **Term** **Completed** | **Grade Earned** |
| BMI 5300 | [**Introduction to Biomedical Informatics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-5300.htm) | Basic | 3 | N/A |   |  |
| BMI 5007 | [**Methods in Health Data Science**](http://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-5007.htm) | Basic | 3 | Prerequisite quiz and consent of instructor. |   |  |
| BMI 6340 | [**Health Information Visualization & Visual Analytics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6340.htm) | Research | 3 | N/A |   |  |
| Choose 2 courses from the Health Data Science and Artificial Intelligence curriculum listed below:  |
| BMI 5304 | [**Advanced Database Concepts in Biomedical Informatics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-5304.htm) | Research | 3 | BMI 5007 |  |  |
| BMI 5353 | [**Biomedical Informatics Data Analysis**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-5353.htm) | Research | 3 | BMI 5007 or consent of instructor. |  |  |
| BMI 6306 | [**Information and Knowledge Representation in Biomedical Informatics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6306.htm) | Advanced | 3 | BMI 5304 |  |  |
| BMI 6318 | [**Big Data in Biomedical Informatics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6318.htm) | Advanced | 3 | BMI 5007 or consent of instructor |  |  |
| BMI 6323 | [**Machine Learning in Biomedical Informatics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6323.htm) | Advanced | 3 | N/A |  |  |
| BMI 6331 | [**Medical Imaging and Signal Pattern Recognition**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6331.htm) | Advanced | 3 | BMI 5007 |  |  |
| BMI 6334 | [**Deep Learning in Biomedical Informatics**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6334.htm) | Advanced | 3 | BMI 5007 and BMI 5353 or Instructor Consent |  |  |
| BMI 6335 | [**Technical Foundations of Generative Artificial Intelligence**](https://sbmi.uth.edu/current-students/catalog-of-courses-bmi/bmi-6335.htm) | Advanced | 3 | BMI 5007 or Instructor Consent |  |  |

Signatures

This Certificate of Health Data Science and Artificial Intelligence Plan must be completed in collaboration with and signed by the academic advisor. Changes to planned coursework may be made and submitted to an academic dean for review and approval.

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Advisor Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date Published 04/15/2025