

BIOMEDICAL INFORMATICS, CERTIFICATE

The IBI Certificate in Biomedical Informatics is a four-course sequence for non-informatics professionals designed to build the informatics community at Penn and to train informatics-literate clinicians and researchers who will have a broad understanding of the field of biomedical informatics.

Students in the Certificate in Biomedical Informatics Program can expect to obtain a working knowledge of biomedical informatics, its history, the current landscape, and future directions of the field. The four courses in this program also form the core of the Master of Biomedical Informatics (MBMI) program, so certificate students can expect to interact with a variety of students with diverse interests in informatics.

Certificate students who wish to expand their biomedical informatics skills in a degree program may apply to the MBMI program and, if accepted, may transfer credit from the certificate program to meet the requirements of the Master's program.

For more information: <https://www.med.upenn.edu/mbmi/certificate.html>

Curriculum

This certificate requires the completion of four course units.

The certificate curriculum is designed to:

- Provide exposure to the field to those working in biomedical practice or research who would like to be "informatics aware"
- Build a community of those who can collaborate with informaticians and health information technology personnel
- Provide those with an interest in informatics opportunities to learn more about the field

Additionally, each course include hands-on experience in an active learning environment to increase skills and reinforce knowledge, such as:

- Informatics journal club to build critical appraisal skills
- Programming exercises
- Database development and manipulation assignments
- Practice in proposal writing and oral presentation for informatics projects

Code	Title	Course Units
Required Courses		
BMIN 5010	Introduction to Biomedical and Health Informatics	1
BMIN 5020	Database and Data Integration in Biomedical Research	1
BMIN 5030	Data Science for Biomedical Informatics	1
BMIN 5040	Special Topics in Biomedical and Health Informatics	1
Additional program requirements		

Students must complete the online HIPAA and CITI training modules required of all PSOM students

Total Course Units 4

The degree and major requirements displayed are intended as a guide for students entering in the Fall of 2025 and later. Students should consult with their academic program regarding final certifications and requirements for graduation.