

COMPUTATIONAL BIOLOGY & MEDICINE (MS)

Contacts

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Program Website (<https://www.jefferson.edu/academics/colleges-schools-institutes/life-sciences/degrees-programs/master-programs/computational-biology-medicine.html>)

Program Description

The Master of Science in Computational Biology & Medicine at Thomas Jefferson University equips students with in-demand data skills essential for the future of biomedical science.

Technological breakthroughs in biology and medicine have been transforming the biomedical sciences into "information sciences," creating a digital divide that is an ongoing challenge to researchers, clinicians and educators. As a result, the demand for scientists who can successfully analyze complex biomedical data is skyrocketing—with no signs of slowing down.

The MS in Computational Biology & Medicine program addresses this gap by teaching essential and valuable skills that will allow practitioners to become proficient in their assigned tasks, compete effectively in the marketplace and contribute to research teams in academia, the private sector and other venues.

The curriculum features a required MS thesis, specialized electives in professional development and hands-on experiential learning through clerkships—ensuring graduates can hit the ground running.

Code	Title	Credits
GC 558	Intro to UNIX & Program in C	3
GC 559	Intro to R Programming	3
GC 561		
GC 562	Computational Genomics	3
GC 563	Computational Transcriptomics	3
GC 564	Data Mining & Machine Learning	3
GC 565		
GC 640	Research Ethics	1
GC 660	Statistical Methods	3
C 723		
GC 7XX		6
Designated Electives		7
GC XXX		
GC 510	Database Design & Mgmt	
GC 560		
BI 550	Topics-Medical Biochem	

Curriculum: 33 credits