

BIOMEDICAL INFORMATICS CONCENTRATION

Applied Computing and Informatics, Bachelor of Science - Biomedical Informatics Concentration Requirements

Code	Title	Credits
General Education Requirements - 46 Hours Required		
Minimum of "C-" required		
Fundamental Academic Skills		15
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	ENGLISH COMPOSITION II	
Writing in the Discipline		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1100	DATA LITERACY AND VISUALIZATION	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
or STAT 1100	DATA LITERACY AND VISUALIZATION	
or STAT 1530	ELEMENTARY STATISTICS	
Distribution Requirements		31
Natural Science - From two disciplines and at least one lab - 7 hrs		
Social Science - From two disciplines - 9 hrs		
Humanities and Fine Arts - From two disciplines - 9 hrs		
Global Diversity - 3 hrs		
US Diversity - 3 hrs		
MAJOR REQUIREMENTS - 61 Hours Required		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
All of the Following:		43
CIST 1010	LEARN AND EARN: COLLEGE AND CAREER SUCCESS	
CSCI 1200	COMPUTER SCIENCE PRINCIPLES (** ^)	
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY (**)	
ACMP 1010	HUMAN-CENTERED COMPUTING (** ^)	
BIOI 1000	DIGITAL HEALTH AND BIOLOGICAL SYSTEMS (**)	
CIST 1600	INTRODUCTION TO PROGRAMMING USING PRACTICAL SCRIPTING (^)	
or CIST 1400	INTRODUCTION TO COMPUTER SCIENCE I	
ACMP 2000	DATA ANALYSIS AND MACHINE LEARNING	
ACMP 2100	FUND OF SOFTWARE & HARDWARE CONST.	
ACMP 2400	DEVOPS & PLATFORM ENGINEERING	

CIST 2500	INTRODUCTION TO APPLIED STATISTICS FOR IS&T (^)	
ACMP 2990	APPLIED COMPUTING AND INFORMATICS SEMINAR (^ taken 3 times for 1 cr each)	
CIST 3000	ADVANCED COMPOSITION FOR IS&T (** ^)	
ACMP 3100	DATA STRUCTURES FOR INFORMATICS or CSCI 3320 DATA STRUCTURES	
CIST 3110	INFORMATION TECHNOLOGY ETHICS (^)	
ACMP 4980	APPLIED COMPUTING AND INFORMATICS CAPSTONE PROJECT I (^)	
Biomedical Informatics Concentration Courses - 18 Hours Required		
All of the following:		12
BIOI 3000	APPLIED BIOINFORMATICS (^)	
BIOI 4860	BIOINFORMATICS ALGORITHMS (^)	
BIOI 4870	DATABASE SEARCH AND PATTERN DISCOVERY IN BIOINFORMATICS (^)	
BIOI 4890	COMPUTERIZED GENETIC SEQUENCE ANALYSIS (^)	
Select 6 credit hours from the following:		6
BIOL 1450	BIOLOGY I (**)	
CHEM 1140	FUNDAMENTALS OF COLLEGE CHEMISTRY (** ^)	
ISQA 3910	INTRODUCTION TO PROJECT MANAGEMENT (^)	
ACMP 4000	SPECIAL TOPICS IN IT INNOVATION	
CSCI 4150	GRAPH THEORY & APPLICATIONS (^)	
ACMP 4260	USER EXPERIENCE DESIGN (^)	
ACMP 4510	INTERNSHIP IN APPLIED COMPUTING AND INFORMATICS	

ELECTIVES

#Elective hours as required to reach a total of 120 hours

¹ Special topics may only count toward a max of 6 credits in the concentration and the topic must be approved by the concentration.