

# DESIGN AND INNOVATION CONCENTRATION

## Applied Computing and Informatics, Bachelor of Science - Design and Innovation Concentration Requirements

Code	Title	Credits
<b>General Education Requirements - 34 Hours Required</b>		
Minimum of "C-" required		
<b>Fundamental Skills</b>		<b>15</b>
<b>Writing – 6 hrs.</b>		
ENGL 1150	ENGLISH COMPOSITION I	
ENGL 1160	COLLEGE RESEARCH AND INFORMATION LITERACY	
<b>Oral Communication – 3 hrs.</b>		
CMST 1110	PUBLIC SPEAKING FUNDS	
or CMST 2120	ARGUMENTATION AND DEBATE	
<b>Quantitative Literacy – 3 hrs.</b>		
MATH 1120	INTRODUCTION TO MATHEMATICAL AND COMPUTATIONAL THINKING	
or MATH 1130	QUANTITATIVE LITERACY	
or MATH 1140	QUANTITATIVE REASONING FOR HEALTHCARE PROFESSIONALS	
or MATH 1300	COLLEGE ALGEBRA WITH SUPPORT	
<b>Data Literacy – 3 hrs.</b>		
Select one from the following:		
STAT 1100	DATA LITERACY AND VISUALIZATION	
STAT 1530	ELEMENTARY STATISTICS	
Until Fall 2028, students can satisfy this requirement with an approved data literacy course, or any approved natural or social science general education course.		
<b>Breadth of Knowledge</b>		<b>13</b>
Social Science – 3 hrs.		
Humanities – 3 hrs.		
Natural & Physical Science (must complete a lab) – 4 hrs.		
Arts – 3 hrs.		
<b>Individual and Social Responsibility</b>		<b>6</b>
Cultural Knowledge – 3 hrs.		
Civic Knowledge and Engagement – 3 hrs.		
<b>MAJOR REQUIREMENTS - 61 Hours Required</b>		
**Course will satisfy UNO's General Education requirement		
^Course requires pre-requisite(s)		
<b>All of the Following:</b>		<b>43</b>
CIST 1010	LEARN AND EARN: COLLEGE AND CAREER SUCCESS	
CSCI 1200	COMPUTER SCIENCE PRINCIPLES (** ^)	
CYBR 1100	INTRODUCTION TO INFORMATION SECURITY (**)	
ACMP 1200	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	FUNDAMENTALS OF SOFTWARE AND HARDWARE CONSTRUCTION (^)
ACMP 2400	DEVOPS AND 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	TECHNICAL WRITING & COMMUNICATION FOR IS&T (^)
ACMP 3200	DATA STRUCTURES AND ALGORITHMS FOR APPLIED COMPUTING AND INFORMATICS (^)
or CSCI 3320	DATA STRUCTURES
CIST 3110	INFORMATION TECHNOLOGY ETHICS (** ^)
ACMP 4580	CAPSTONE (^)
<b>Design and Innovation Concentration Courses - 18 Hours Required</b>	
<b>All of the following:</b>	
ACMP 3220	CREATIVITY AND INNOVATION (^)
ACMP 3330	DESIGN METHODS AND PROTOTYPING (^)
ACMP 4260	USER EXPERIENCE DESIGN (^)
<b>Select 9 credit hours from the following:</b>	
SOC 2130	SOCIAL STATISTICS (^)
CSCI 2240	INTRODUCTION TO C PROGRAMMING (^)
ART 2300	WEB DESIGN (^)
ART 3170	DIGITAL GAME DESIGN
ART 4180	ADVANCED DIGITAL GAME DESIGN (^)
ISQA 3900	WEB APPLICATION DEVELOPMENT (^)
ISQA 4130	INFORMATION TECHNOLOGY FOR DEVELOPMENT
ISQA 4900	FULL STACK DEVELOPMENT (^)
MKT 3400	MARKETING INNOVATION (^)
ENTR 4730	NEW VENTURE FORMATION (^)
PSYC 4650	CREATIVITY AND INNOVATION IN ORGANIZATIONS
ACMP 4000	SPECIAL TOPICS IN IT INNOVATION <sup>1</sup>
ACMP 4510	INTERNSHIP IN APPLIED COMPUTING AND INFORMATICS

### ELECTIVES

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

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