

DESIGN AND INNOVATION CONCENTRATION

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

| Code | Title | Credits |
|---|---|-----------|
| General Education Requirements - 34 Hours Required | | |
| Minimum of "C-" required | | |
| Fundamental Skills | | 15 |
| Writing – 6 hrs. | | |
| ENGL 1150 | ENGLISH COMPOSITION I | |
| ENGL 1160 | COLLEGE RESEARCH AND INFORMATION LITERACY | |
| Oral Communication – 3 hrs. | | |
| CMST 1110 | PUBLIC SPEAKING FUNDS | |
| or CMST 2120 | ARGUMENTATION AND DEBATE | |
| Quantitative Literacy – 3 hrs. | | |
| 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 | |
| Data Literacy – 3 hrs. | | |
| 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. | | |
| Breadth of Knowledge | | 13 |
| Social Science – 3 hrs. | | |
| Humanities – 3 hrs. | | |
| Natural & Physical Science (must complete a lab) – 4 hrs. | | |
| Arts – 3 hrs. | | |
| Individual and Social Responsibility | | 6 |
| Cultural Knowledge – 3 hrs. | | |
| Civic Knowledge and Engagement – 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 1200 | HUMAN-CENTERED COMPUTING (**) | |
| BIOI 1000 | DIGITAL HEALTH AND BIOLOGICAL SYSTEMS (**) | |

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| 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 (^) | |
| Design and Innovation Concentration Courses - 18 Hours Required | | |
| All of the following: | | 9 |
| ACMP 3220 | CREATIVITY AND INNOVATION (^) | |
| ACMP 3330 | DESIGN METHODS AND PROTOTYPING (^) | |
| ACMP 4260 | USER EXPERIENCE DESIGN (^) | |
| Select 9 credit hours from the following: | | 9 |
| 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 ¹ | |
| 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.