# MACHINE LEARNING CERTIFICATE

## Department of Computer Science, College of Information Science & Technology

#### **Vision Statement**

The recent advances in machine learning (ML) have made significant impacts in diverse fields such as health care, agriculture, transportation, education, global security, etc. Machine learning experts are in very high demand for right now and the foreseeable future. The ML graduate certificate will prepare students to become data scientists, machine learning algorithm designers, deep learning systems engineers, computer vision experts, software and application developers, and other machine learning related professionals.

#### **Program Contact Information**

Myoungkyu Song, PhD, Graduate Program Chair (GPC) 173C Peter Kiewit Institute (PKI) 402.554.2077 myoungkyu@unomaha.edu

Emily Wiemers, Graduate Advisor 170 Peter Kiewit Institute (PKI) 402.554.3819 ewiemers@unomaha.edu

Program Website (https://www.unomaha.edu/college-of-information-science-and-technology/computer-science/prospective-students/graduate-programs.php)

#### **Admissions**

General Application Requirements and Admission Criteria (https://catalog.unomaha.edu/graduate/admission/)

## Program-Specific Requirements Application Deadlines (Spring 2024, Summer 2024, and Fall 2024)

• Fall: July 1

• Spring: November 1

• Summer: March 1

#### **Other Requirements**

- Individuals with an undergraduate degree and one to two years of work experience in information systems (IS) related roles are eligible to apply for this certificate programs.
- The minimum undergraduate grade point average requirement for the data management certificate is 3.0 or equivalent score on a 4.0 scale. Applicants should have the equivalent of a 4-year undergraduate degree.
- English Language Proficiency: Applicants are required to have a command of oral and written English. Those who do not hold a baccalaureate or other advanced degree from the United States, OR a baccalaureate or other advanced degree from a predetermined country on the waiver list, must meet the minimum language proficiency score requirement in order to be considered for admission. Minimum scores required for this program are:
  - Internet-based TOEFL: 80, IELTS: 6.5, PTE: 53, Duolingo: 110
- Resume: Submit a detailed resume indicating your work experience and background

### **Degree Requirements**

_	-	
Code	Title	Credits
Recommended Prerequisite Course		
CSCI 2410	INTRODUCTION TO DATA ANALYTICS USING PYTHON	
<b>Required Courses</b>		
CSCI 8590	FUNDAMENTALS OF DEEP LEARNING	3
CSCI 8360	MACHINE LEARNING FOR TEXT	3
If a required course is waived, it must be replaced with another course from the electives list below.		
Electives		6
CSCI 8300	IMAGE PROCESSING AND COMPUTER VISION	
CSCI 8110	ADVANCED TOPICS IN ARTIFICIAL INTELLIGENCE	
BMI 8400	LINEAR ALGEBRA FOR ADVANCED COMPUTING AND AI	
Total Credits		12