

# Computer Science Master of Science

## Degree Type

Master of Science

## Environment

online

## Program Length

48 weeks

## Overview

The Computer Science Master of Science curriculum enables students to cultivate advanced software development skills. In this program, you will expand upon previous programming knowledge by developing your own software application through a project-based curriculum that is structured around the real-world development life cycle. You will apply knowledge of computing in the areas of machine learning, data science, and human-computer interaction to produce effective designs and solutions for specific problems. Graduate-level research will be conducted throughout the program, including problem framing, hypothesis creation, and data analysis and visualization. You will also study emerging technologies and how their evolution impacts the industry as a whole. Project work in architecting solutions will serve to enhance your critical-thinking and professional skills necessary for success in the computer science industry.

## Objective

**Master's Objective** The goal of the Computer Science Master of Science degree program is to provide an enriched knowledge and understanding of software-development concepts. Through project-based learning and guided research, the program curriculum will enable you to advance in the discipline and apply progressive knowledge, skills, and abilities to your efforts in software development. The program is designed to foster the development of highly trained individuals who are prepared for work in critical industry roles as well as encourage lifelong learning and critical-thinking skills through threaded research, analysis, and professional development.

## Month 1

Month 1

Code	Title	Credit Hours
COS540	Research Approaches in Computer Science	3.0

## Month 2

Month 2

Code	Title	Credit Hours
COS550	Advanced Software Engineering	3.0

## Month 3

Month 3

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS560	Data Science	3.0

## Month 4

Month 4

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS630	Data Visualization and Extended Reality	3.0

## Month 5

Month 5

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS570	Advanced Artificial Intelligence	3.0

## Month 6

Month 6

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS580	Machine Learning	3.0

## Month 7

Month 7

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS590	Human-Computer Interaction	3.0

## Month 8

Month 8

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS640	HCI Application Development	3.0

## Month 9

Month 9

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS650	Software Project: Research, Planning, and Design	3.0

## Month 10

Month 10

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS660	Software Project: Development I	3.0

## Month 11

Month 11

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS670	Software Project: Development II	3.0

## Month 12

Month 12

<b>Code</b>	<b>Title</b>	<b>Credit Hours</b>
COS680	Software Project: Deployment and Professional Presentation	3.0
<b>Total Credit Hours</b>		<b>36</b>

Please Note

- This program is approved for campus and online; currently only enrolling online.