Computer Science eXtended Reality (XR)

MANCHESTER COMMUNITY COLLEGE

Why Computer Science eXtended Reality (XR)?

The focus of the program is XR, which includes Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR) as it affects business, education, and our social lives. This program teaches students to create and manage environments in the XR world through the creation of environments and by utilizing existing platforms. Students will be able to create assets to use in XR and to utilize XR workspaces for business.

Program Goal

Students are presented with a personalized, student-centered learning program focused on innovative XR workplace applications. The Computer Science Extended Reality (XR) program focuses on emerging technologies as students learn to utilize these platforms in new and exciting ways.

Admission Requirements

The Computer Science eXtended Reality (XR) program currently has no additional requirements.

Technical Standards

Most physical requirements necessary for this program can be accommodated with appropriate documentation.

Potential Jobs

- eXtended Reality (XR) Specialist

Potential Salary

Computer Science remains one of the fastest growing fields, with a projected shortage of qualified job candidates for programmers, networkers, web designers and AI, XR or database professionals.

There is a wide range of jobs in the computer science and innovation industry. As an emerging technology, salary data specific to eXtended Reality (XR) positions is not yet available. Salaries are expected to be similar to those of a Software or App Developer.

See below for the average annual salary range in NH for a ***Software or App Developer.***

ENTRY LEVEL	MID-RANGE	EXPERIENCED
$72,051	$112,590	$132,891

*New Hampshire Occupational Employment & Wages 2021, published by the NH Economic + Labor Market Information Bureau — Salaries are based on 40 hours of work, not including overtime.

Degree Requirements

Computer Science
eXtended Reality (XR)

Degree Program - First Year

First Year	Fall Semester	TH	LAB	CR
CSI105M	Introduction to Computer Science	2	2	3
CIS110M	Microsoft® Computer Applications I	2	2	3
CISXR100M	Introduction to eXtended Reality (XR)	2	2	3
FYE100M	MCC Essentials	1	0	1
MATH155M	College Algebra with Trigonometry	4	0	4
	Apps Elective *(CIS107M or CIS108M)*	2	2	3
	Total	**13**	**8**	**17**

First Year	Spring Semester	TH	LAB	CR
CISXR120M	XR Development	2	2	3
ENGL110XM or ENGL110X	College Composition I with Corequisite or College Composition I	4	0	4
	Programming Language Elective *(3 credits; CIS117M, CIS118M, CIS126M or CIS158M)*	2	2	3
	Physics Elective *(PHYS135M or PHYS210M)*	3	3	4
	English Literature / Philosophy Elective - *(3 credits; Choose any English course or ENGL213M, ENGL214M or PHIL240M)*	3	0	3
	Total	**13**	**9**	**17**

Degree Program - Second Year

Second Year	Fall Semester	TH	LAB	CR
CIS220M	Object Oriented Programming	2	2	3
CISXR210M	The XR Metaverse	2	2	3
CSCN220M	Entrepreneurship in Computer Science	3	3	4
MATH171M	Pre-Calculus	4	0	4
	Technical Elective	2	2	3
	Total	**13**	**9**	**17**

Second Year	Spring Semester	TH	LAB	CR
CIS210M	Data Structures and Elementary Algorithms	3	3	4
CIS291M	Capstone Senior Seminar	2	2	3
MATH170M	Discrete Mathematics	4	0	4
	Social Science Elective - *(3 credits; ANTH, ECON, GEOG, HIST, POLS, PSYC, SOCI)*	3	0	3
	Total	**12**	**5**	**14**
	Total Credits - 65			

Some training in this program is affiliated with Amazon Web Service (AWS) Academy.

More information about this program program is available on our website: www.mccnh.edu/academics/programs/ computer-science-xr-extended-reality

aws academy