En Route

This document provides suggestions for obtaining a Master's degree in Computer Science or Digital Arts and Sciences as you work towards the Human-Centered Computing Ph.D. Please note that these classes are not what are required to obtain any of the degrees listed. Rather, these courses will help to optimize your path towards obtaining both degrees. In other words, you are only required to take the courses outlined in the original MS degree requirements. We encourage you to discuss this with your advisor.

M.S in Computer Science (Engineering)

12 credits MS in Computer Science Core

COT 5405 Analysis of Algorithms

Three from the following five courses:

- CDA 5155 Computer Architecture Principles
- COP 5615 Distributed Operating System Principles
- COP 5556 Programming Language Principles
- CNT 5106C Computer Networks
- COP 5536 Advanced Data Structures

9 credits HCC Core

CEN5728- UX Design

CAP5100- Human-Computing Interaction

CAP5108- Research Methods for Human-Centered Computing

3 credits

CIS6905- Individual Study

Maximum 6 credits outside the department MAY be taken with approval from the Graduate Affairs Committee.

M.S in Computer Science (Liberal Arts and Sciences (CLAS)

9 credits MS in Computer Science Core

- COT 5405 Analysis of Algorithms
- Two from the following five courses:
 - COT 5615 Mathematics for Intelligent Systems
 - COT 6315 Formal Languages and Computer Theory

- CNT 5106C Computer Networks
- COP 5536 Advanced Data Structures
- COP 5556 Programming Languages Principles

21 other graduate-level credits.

- Minimum of 9 credits MUST be taken from CISE graduate-level courses
 - 9 credits HCC Core
 - CEN5728- UX Design
 - CAP5100- Human-Computing Interaction
 - CAP5108- Research Methods for Human-Centered Computing
 - 3 credits
 - CIS6905- Individual Study

Minimum 9 credits MUST be taken outside the department - courses must have the approval from the Graduate Affairs Committee.

• At least 3 credits must be offered by the College of Liberal Arts and Sciences (taken from the approved list of courses).

M.S in Digital Arts and Science (Engineering)

Required Core Courses (6 credits):

- CAP 5705 Computer Graphics
- CAP 5100 Human-computer Interaction

Additional core courses (12 credits):

- CAP 5416 Computer Vision
- CAP 5635 Artificial Intelligence
- CAP 6701 Advanced Computer Graphics
- CEN 5726 Natural User Interaction
- 5000 or 6000-level DAS oriented course approved by Advisor
- Up to 3 credits of CIS 6905

Course and Credit Requirement for Thesis Option or Project in Lieu of Thesis Option:

- 18 CISE graduate core credits.
- 6 master thesis credits (CIS 6971)
- 6 additional 5000 or 6000-level credits (May include a maximum of 3 credits CIS 6905)