### **MASTER OF SCIENCE IN COMPUTER SCIENCE**

## **Program of Study**

Total: 36 units

## **Undergraduate Prerequisite Courses**

CSCI 21	Introduction to Programming I	3 units
CSCI 22	Introduction to Programming II	3 units
CSCI 30	Data Structures and Algorithms	3 units
CSCI 41	Information Management	3 units
CSCI 42	Introduction to Software Engineering	3 units
CSCI 50.01	Computer Organization, Lecture	3 units
CSCI 51.01	Operating Systems, Lecture	3 units
CSCI 70	Structure and Interpretation of Programming Languages	3 units
MATH 30.23	Applied Calculus for Science and Engineering I	3 units
MATH 30.24	Applied Calculus for Science and Engineering II	3 units
MATH 51.3	Math for Computer Science I	3 units

#### **Core Courses: 12 units**

CSCI 201	Advanced Data Structures and Algorithms	3 units
CSCI 202	Programming Languages and Paradigms	3 units
CSCI 203	Theory of Automata and Formal Languages	3 units
CSCI 204	Computer Architecture and Operating Systems	3 units

### **Tracks: 18 units**

The Department offers several tracks. Students must take 6 courses from their chosen track. A list of courses that must be taken from each track are available from the department. Elective courses offered by other departments may be taken subject to the approval of the DISCS Graduate Program Director.

- Affective Computing/Computer Science and Education
- Computer Algorithms and Applications
- Computational Sound and Music
- Computer Vision
- Networks Research
- Social Computing
- Blockchain Technologies

### **Comprehensive Exams**

CSCI 296 Comprehensive Examinations

At the tail-end of the program, students are required to take and pass their comprehensive examinations, and accomplish a thesis under their chosen topic among the tracks offered by the program.

### Thesis and Oral Defense: 6 units

CSCI 299.1	Thesis I
CSCI 299.2	Thesis II

# **Publication Requirement**

Students of the program are required to have a publication in a refereed journal/peer-reviewed proceedings regarding the student's research work as aligned with their thesis.

Tabulated below is the program of study by year and semester for full-time students.

Year 1						
Intersession		First Semester		Second Semester		
Course Cat	Units	Course Cat	Units	Course Cat	Units	
ELECTIVE	3	CSCI 201	3	CSCI 203	3	
ELECTIVE	3	CSCI 202	3	CSCI 204	3	
		ELECTIVE	3	ELECTIVE	3	
		ELECTIVE	3	ELECTIVE	3	
Total Units	6	Total Units	12	Total Units	12	

Year 2					
Intersession		First Semester		Second Semester	
Course Cat	Units	Course Cat	Units	Course Cat	Units
CSCI 296	0	CSCI 299.1	3	CSCI 299.2	3
Total Units	0	Total Units	3	Total Units	3