

# **MASTER OF SCIENCE IN COMPUTING**

#### **Curriculum Structure**

## The Program (Total 31 Cr Hrs)

Curriculum Components	Total Courses	Total Cr Hrs
Core Courses	3	7
Focus Area Electives	4	12
Major Electives	2 Thesis option / 3 Project option	6 Thesis option / 9 Project option
Thesis / Thesis option	2	6
Project / Project option	1	3
Total	Thesis option: 11 Project option: 12	31

#### **Major Core Requirements (7 Cr Hrs)**

Core courses	5
Course ID	Course Title
GENG 602	Applied Research Methodology
CMPT 671	Algorithm Design and Modeling
CMPT 609	Seminar in Computing

### Major Electives (6 Cr Hrs Thesis option/9 Cr Hrs Project option)

Major Electiv	Major Electives		
Course ID	Course Title		
CMPT 610	Embedded Computing Systems		
CMPT 612	Network Security		
CMPT 603	Applied Digital Signal Processing		
CMPT 622	Human Computer Interaction		
CMPT 661	Web Development		
CMPS 653	Big Data Analytics		
CMPT 672	Enterprise Information Systems		
CMPT 645	Simulation and Modeling in Computer Networks		
CMPT 642	Information Security		

\*In addition, courses from a Focus Area Package outside the student's own focus area are considered Major Electives. For example, if a student in Computer Engineering takes a course from the Computer Science Focus Area Package (or vice versa), it will be counted as a Major Elective.

#### **Focus Areas**

### Focus Area Package (12 Cr Hrs)

Computer Er	Computer Engineering Focus Area		
Course ID	Course Title		
CMPT 641	Advanced Computer Networks		
CMPT 643	Wireless Communication		
CMPT 608	Advanced Architecture and Design of Computer Systems		
CMPT 611	Visual Computing		
CMPT 602	Advanced Robotics		
CMPT 683	Special Topics in Computer Engineering		

Computer So	Computer Science Focus Area		
Course ID	Course Title		
CMPT 606	Advanced Database System		
CMPT 605	Advanced Software Engineering		
CMPT 623	Distributed Systems and Cloud Computing		
CMPT 621	Information Retrieval		
CMPT 673	Machine Learning		
CMPT 682	Special Topics in Computer Science		

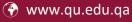
### Thesis Option Requirement (6 Cr Hrs)

Thesis option		
Course ID	Course Title	
CMPT 699	Master Thesis	

### **Project Option Requirement (3 Cr Hrs)**

Project option		
Course ID	Course Title	
CMPT 690	Project	







### **STUDY PLAN**

# **Thesis option**

First Year (19 Cr Hrs)				
	Fall Semester			
Course #	Course Title	Cr Hrs		
GENG 602	Applied Research Methodology	3		
CMPT XXX	Focus Area Elective	3		
CMPT XXX	Major Elective	3		
	Spring Semester			
Course #	Course Title	Cr Hrs		
CMPT 671	Algorithm Design and Modeling	3		
CMPT 609	Seminar in Computing	1		
CMPT XXX	Major Elective	3		
CMPT XXX	Focus Area Elective	3		

Second Year (12 Cr Hrs)			
	Fall Semester		
Course #	Course Title	Cr Hrs	
CMPT XXX	Focus Area Elective	3	
CMPT XXX	Focus Area Elective	3	
CMPT 699	Master Thesis	3	
Spring Semester			
Course #	Course Title	Cr Hrs	
CMPT 699	Master Thesis	3	

# **Track: Project option**

	First Year (19 Cr Hrs)			
	Fall Semester			
Course #	Course Title	Cr Hrs		
GENG 602	Applied Research Methodology	3		
CMPT XXX	Focus Area Elective	3		
CMPT XXX	Major Elective	3		
	Spring Semester			
Course #	Course Title	Cr Hrs		
CMPT 671	Algorithm Design and Modeling	3		
CMPT 609	Seminar in Computing	3		
CMPT XXX	Major Elective	3		
CMPT XXX	Focus Area Elective	3		

Second Year (12 Cr Hrs)				
	Fall Semester			
Course #	Course Title	Cr Hrs		
CMPT XXX	Focus Area Elective	3		
CMPT XXX	Focus Area Elective	3		
CMPT XXX	Major Elective	3		
Spring Semester				
Course #	Course Title	Cr Hrs		
CMPT 690	Master Project	3		

