FACULTY OF COMPUTING AND ENGINEERING SCIENCES

MS Computer Science

SZABIST offers MSCS degree in three domains: Core Computer Science, Software Engineering (SE) and Networks and Security (N&S) in order to cater the market needs. At Dubai Campus currently the 2 domains offered are Software Engineering (SE) and Core (CS)

The student is required to complete 9 Courses (27 credit hours) and Two Independent Research Study (6 credit hours) OR One Thesis (6 credit hours).

The maximum time limit to complete the MS degree is 4 years.

Master of Science in Computer Science (In Core Computer Science)

First Year

First Semester
CSC 5105   Research Methodology
CSC 5102   Theory of Computation

Second Semester
CSC 5201   Advanced Operating Systems
CSC 5101   Advanced Algorithms Analysis

Third Semester
CSC 5202   Advanced Computer Architecture
CSC 5xxx   Elective-I (from CS Stream)

Second Year

First Semester
CSC 5xxx   Elective-II (from CS-Stream)
CSC 5xxx   Elective-III (from CS-Stream)

Second Semester
CSC 5xxx   Thesis /IRS I /OR Course Work
            (from CS-Stream-)
CSC 5xxx   Elective-IV (from CS-Stream)

Third Semester
 CSC 5xxx Thesis /IRS II /OR Course Work
            (from CS-Stream)

Master of Scuence in Computer Science (With Specialization in Software Engineering)

First Year

First Semester
CSC 5105   Research Methodology
CSC 5102   Theory of Computation

Second Semester
CSC 5201   Advanced Operating Systems
CSC 5101   Advanced Algorithms Analysis

Third Semester
CSC 5202   Advanced Computer Architecture
SEC 5xxx   Elective-I (from SE Stream)

Second Year

First Semester
SEC 5xxx   Elective-II (from SE-Stream)
SEC 5xxx   Elective-III (from SE-Stream)

Second Semester
CSC/SEC 5xxx   Thesis/ IRS I/OR Course Work
            (from CS Stream or from SE-Stream)
SEC 5xxx   Elective-IV (from SE-Stream)

Third Semester
 CSC/SEC 5xxx Thesis /IRS II/OR Course Work
            (from CS Stream or from SE-Stream)

FACULTY OF COMPUTING AND ENGINEERING SCIENCES

CS-Stream

CSC 5164   Real-Time Systems
CSC 5162   Digital Image Processing
CSC 5161   Machine Learning
CSC 5163   Data Mining
CSC 5166   Operation Research
CSC 5167   Deep Learning
CSC 5264   Expert Systems
CSC 5267   Reverse Engineering
CSC 5266   Digital Forensics and Malware Analysis
CSC 5263   Advanced Resource Sharing Architecture
CSC 5262   Computer Vision
CSC 5268   Robotics
CSC 5261   Advanced Database Design
CSC 5265   Distributed Computing
CSC 5269   Systems and Network Programming
CSC 5168   Big Data Analytics
CSC 5271   Natural Langauge Processing

SE-Stream

SEC 5163   Software Requirement Engineering
SEC 5161   Software System Architecture
SEC 5164   Software System Quality
SEC 5162   Advanced Software Engineering
SEC 5261   Software Analysis and Testing
SEC 5263   Web Engineering
SEC 5262   Software Project Management

Pre-Requisites:

- For any advanced course, pre-requisite course must have been taken before.
- For each track, the following courses must have been done prior to admission.

MS (CS) (In Core Computer Science)

Programming Fundamental
Data Structures
Operating Systems
Finite Automata Theory and Formal Languages

MS (CS) with SE-Specialization

Programming Fundamental
Data Structures
Operating Systems
Software Engineering

MS (CS) with N&S-Specialization

Programming Fundamental
Data Structures
Operating Systems
Data Communication and Computer Networks