



AMERICAN INTERNATIONAL UNIVERSITY-BANGLADESH

Faculty of Science and Technology

Department of Computer Science

MsCS Curriculum

Foundation Courses

CSC5001 Foundation in Computing

CSC5002 Foundation in Computer Systems

Core Courses

CSC5011 Design and Analysis of Algorithms

CSC5012 Advanced Operating System

Area of Specialization 1: Computing

CSC5101 Combinatorial & Graph Algorithms

CSC5102 Parallel & Distributed Algorithms

CSC5103 Distributed Systems

CSC5104 Compiler Construction

CSC5105 Cryptography Techniques and Data Security

CSC5106 Logic Programming and Constraints

CSC5107 Principles of Program Analysis

CSC5199 Advanced Topics in Computing

Area of Specialization 2: Computer Network

& Architecture

CSC5201 Network Security and Management

CSC5202 Sensor Networks and Wireless Computing

CSC5203 Mobile and Multimedia Networking

CSC5204 Parallel Computer Systems

CSC5205 Embedded Systems

CSC5206 Simulation and Modeling Techniques

CSC5207 Critical Systems and Verification

CSC5208 Computer System Performance Analysis

CSC5209 Performance Analysis of Embedded Systems

CSC5299 Advanced Topics in Computer Network

Area of Specialization 3: Information & Database Management

CSC5301 Information Security Management
CSC5302 IT Marketing & Management
CSC5303 E-Commerce Technologies
CSC5304 Database Design & Security
CSC5305 Database Technology and Management
CSC5306 Parallel & Distributed Database Systems
CSC5307 Data Warehousing and Data Mining
CSC5308 Multimedia Information Systems
CSC5309 Web Development Technologies
CSC5399 Advanced Topics in IS

Area of Specialization 4: Software Engineering

CSC5401 Software Requirements Engineering
CSC5402 Software Construction, Architecture and Design
CSC5403 Software Engineering Process and Configuration Management
CSC5404 Software Evolution and Maintenance
CSC5405 Software Quality Assurance and Testing
CSC5406 Software Project Management
CSC5407 Software Documentation and Tools
CSC5408 Methods in Software Engineering
CSC5409 Software Engineering Ethics
CSC5499 Advanced Topics in Software Engineering

Area of Specialization 5: Intelligent Systems

CSC5501 Knowledge-Based Systems
CSC5502 Machine Learning & Neural Networks
CSC5503 Computer Vision & Pattern Recognition
CSC5504 Image Processing
CSC5505 Natural Language Processing
CSC5506 Bioinformatics
CSC5507 Intelligent Web Systems
CSC5508 Human Computer Interaction
CSC5509 Uncertainty Modeling in AI
CSC5599 Advanced Topics in Intelligent Systems