

# **EMCS PROGRAM**

# **DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING**

# JAHANGIRNAGAR UNIVERSITY

SAVAR, DHAKA 1342, BANGLADESH

#### PROGRAM BROCHURE

# Master in Computer Science

#### **Program Features:**

- Highly qualified faculty members with international teaching and research exposures
- 1-year (3 semesters) program to complete within short time
- Classes conducted on Fridays only
- Wi-fi connectivity and modern computer lab facilities
- Class rooms equipped with multimedia facilities
- Most updated library with latest books and journals
- Transport facilities for the students (Dhaka-Campus-Dhaka)

#### **Credit Requirements:**

Academic Background	Foundation Courses (Cr. Hrs.)	Core Courses (Cr. Hrs.)	Research Project (Cr. Hrs.)	Total (Cr. Hrs.)
BSc in CSE/IT or equivalent	6.0	21.0	3.0	24.0
Others	15.0	21.0	3.0	24.0

#### **Foundation Courses:**

Course Code	Course Title	
EMCS 601	Structured Programming Language	
EMCS 602	Object Oriented Programming	
EMCS 603	Discrete Mathematics	
EMCS 604	Data Structures and Algorithms	
EMCS 605	Digital Logic Design	
EMCS 606	Operating Systems	
EMCS 607	Data Communication	
EMCS 608	Numerical Methods	
EMCS 609	Signals and Systems	
EMCS 610	Computer Graphics	
EMCS 611	System Design and Software Engineering	
EMCS 612	Database Systems	
EMCS 613	Simulation and Modeling	

### Fee Structure:

Description	Fees (BDT)	
Admission Fee	15,000/-	
Development Fee	15,000/-	
Seminar Fee	3,000/-	
Semester Fee	5,000/- × 3 = 15,000/-	
(5,000/- per semester)		
Tuition Fee	2,500 × 30 =75,000/- (with maximum waiver)	
(2,500/- per credit)	2,500 × 39 = 97,500/- (without waiver)	
Total Cost:	1,23,000 /- ~ 1,45,500/-	

#### **Admission Requirements:**

Applicants must satisfy any one of the following criteria-

- 4-year BSc (or 3-year Hons. + 1-year MSc) in CS/CSE/IT/EEE/ ECE/ ETE or equivalent
- BSc (Engineering) in any discipline
- 4-year BSc (or 3-year Hons + 1-year MSc) in Physics/Mathematics/ Statistics/Geological Sciences/Chemistry/Environmental Sciences
- 4-year BSc (or 3-year Honors + 1-year MSc) in any subject with at least 1-year PGD in CSE/IT or equivalent

#### **Core Courses:**

Course Code	Course Title	
EMCS 651	Computer Architecture	
EMCS 652	Object Oriented Software Development	
EMCS 653	Advanced DBMS	
EMCS 654	E-Business	
EMCS 655	Web Design and Programming	
EMCS 656	Artificial Intelligence and Expert Systems	
EMCS 657	Parallel Systems	
EMCS 658	Mobile and Wireless Communication	
EMCS 659	Network Management	
EMCS 660	Software Project Management & Quality Assurance	
EMCS 661	Computer and Communication Networks	
EMCS 662	Digital Signal Processing	
EMCS 663	Digital Image Processing	
EMCS 664	Computer Vision	
EMCS 665	Medical Imaging	
EMCS 666	Data Mining	
EMCS 667	Industrial Automation Systems	
EMCS 668	Health Informatics	
EMCS 669	Management Information System	
EMCS 670	Software Testing	
EMCS 671	Computer Ethics and Cyber Law	
EMCS 672	Neuroinformatics	
EMCS 673	Internet Engineering and IP technology	
EMCS 674	Switching and Routing Technology	
EMCS 675	Network Security	
EMCS 676	Distributed Computing System	
EMCS 677	Neural Network	
EMCS 678	Embedded System Engineering	
EMCS 679	Parallel Processing	
EMCS 680	Advanced Processor Architecture	
EMCS 681	Bio-Informatics	
EMCS 682	Information Theory and Coding System	
EMCS 683	Adaptive Signal Processing	
EMCS 684	Telecommunication Network Planning & Optimization	
EMCS 685	Telehealth	
EMCS 600	Research Project	

#### **Admission Procedure:**

A candidate satisfying the requirements for admission as set forth by the program authority shall have to sit for a test on a scheduled date. The duration of the admission test will be 1 hour. The test will be comprise of MCQ, IQ and short type questions related to Mathematics, Computer Fundamentals, Programming, Database, Computer Networks and English. Based on the obtained marks in the test a Merit list and a Waiting list will be published in the program website/notice board.

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