

**COMSATS Institute of Information Technology**  
**Registrar Office, Principal Seat, Islamabad**

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No: CIIT-Reg/Notif-653/12/977

July 3, 2012

**NOTIFICATION**

**Scheme of Studies of Master of Computer Science (MCS)**

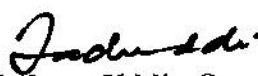
It is hereby notified that the Academic Council in its 13<sup>th</sup> Meeting held on June 04, 2012 approved the following scheme of studies of Master of Computer Science, (MCS) with effect from Fall 2012 at CIIT system:

i.	Minimum Duration:	02 Years
ii.	Minimum No. of Semesters for Morning Program:	04
iii.	Minimum No. of Semesters for Evening Programs:	06
iv.	<b>Course Work</b>	
	a. Core Courses (List attached)	18
	b. Elective Courses (List attached)	03
	<b>Total No. of Courses:</b>	<b>21</b>
	<b>Total No. of Minimum Credit Hours:</b>	<b>73</b>

**Note:**

**The Regulations relating to Undergraduate Degree Programs approved by the Competent Authority and amended from time to time shall also be applicable to this program.**

This issues with the approval of the Competent Authority.

  
Nadeem Uddin Qureshi  
Additional Registrar

**Encl:** (pages 03 in total including this page)

**Distribution:**

1. Dean, Faculty of Information Sciences and Technology, CIIT.
2. All Directors CIIT System.
3. Chairman, Department of Computer Science, CIIT.
4. Incharge, CIIT Islamabad Campus.
5. All Incharges, Academic Sections, CIIT Campuses.
6. All HoD's/Incharges, Department of Computer Science, CIIT Campuses.
7. Controller of Examinations, CIIT.
8. All Incharges, Examination Departments, CIIT Campuses.

**CC:**

1. PS to Rector.
2. PA to Registrar.

## List of Core Courses

Sr. No.	Course Code	Course Title	Credit Hours	Pre-requisite
1.	CSC101	Introduction to Computing	3(3, 0)	
2.	CSC102	Discrete Structures	3(3, 0)	
3.	CSC141	Introduction to Computer Programming	4(3, 1)	
4.	CSC211	Data Structures	4(3, 1)	
5.	CSC221	Computer Organization and Assembly Language	4(3, 1)	
6.	CSC241	Object Oriented Programming	4(3, 1)	
7.	CSC271	Database Systems	4(3, 1)	
8.	CSC291	Software Engineering I	3(3, 0)	
9.	CSC312	Automata Theory	3(3, 0)	CSC102
10.	CSC322	Operating Systems Concepts	3(3, 0)	CSC211
11.	CSC339	Computer Communication and Networks	4(3, 1)	
12.	CSC392	Software Engineering II	3(3, 0)	CSC291
13.	CSC441	Compiler Construction	4(3, 1)	CSC312
14.	CSC447	Enterprise Systems Development	3(3, 0)	CSC241
15.	CSC462	Artificial Intelligence	3(2, 1)	
16.	CSC499	Project	6(0, 6)	
17.	EEE440	Computer Architecture	3(3, 0)	CSC221
18.	HUM102	Report Writing Skills	3(3, 0)	

## List of Electives

Sr. No	Course Code	Course Title	Credit Hours	Pre-requisite
1.	CSC253	Computer Graphics	3(2, 1)	
2.	CSC332	Network Security	3(3, 0)	
3.	CSC343	Network Design and Implementation	3(3, 0)	
4.	CSC344	Wireless and Mobile Computing	3(3, 0)	
5.	CSC373	Management Information Systems	3(2, 1)	CSC101
6.	CSC412	Cryptography	3(3, 0)	CSC339
7.	CSC421	Systems Programming	3(3, 0)	
8.	CSC423	Foundations of 3D Modeling	3(3, 0)	
9.	CSC424	Advanced Principles of 3D Modeling	3(3, 0)	
10.	CSC425	Broadband Multimedia	3(3, 0)	
11.	CSC442	Principles of Programming Languages	3(3, 0)	CSC241
12.	CSC443	Scripting Languages	3(3, 0)	
13.	CSC444	Visual Programming	3(3, 0)	
14.	CSC445	Modern Programming Languages	3(3, 0)	CSC241
15.	CSC446	Advanced Object Oriented Programming	3(3, 0)	CSC241
16.	CSC451	Multimedia and Hypermedia System	3(3, 0)	CSC339
17.	CSC452	Virtual Reality	3(3, 0)	
18.	CSC454	Computer Animations	3(3, 0)	

19.	CSC455	Computer Vision	3(3, 0)	
20.	CSC456	Human Computer Interaction	3(3, 0)	
21.	CSC461	Neural Networks	3(3, 0)	CSC462
22.	CSC471	Distributed Database Systems	3(3, 0)	CSC271
23.	CSC482	Computer Law	3(3, 0)	
24.	CSC494	Software Project Management	3(3, 0)	CSC392
25.	CSC495	Enterprise Resource Planning	3(3, 0)	
26.	CSC496	Business Process Reengineering	3(3, 0)	CSC291

*Included*