



*BCS - FA10-*

*1) AR(acad)*  
*2) ACE*

*82*

# COMSATS Institute of Information Technology

(Directorate of Academics)

No.CIIT-Dir(Acad)/Notif-270

February 03, 2010

## NOTIFICATION

Consequent upon approval of the competent authority / for the Scheme of Studies for Bachelor of Science in Computer Science, BS (CS) effective from Spring 2010 is hereby notified for the students enrolled in the CIIT.

### Scheme of Studies

*SP11-FA10-SP10*

Semester 1		Credit Hours	Prerequisite(s)
Course Code	Course Title		
HUM110 ✓	Islamic Studies ✓	3(3, 0)	
HUM100 ✓	English Comprehension and Composition	3(3, 0)	
EEE121	Electric Circuits Analysis I	4(3, 1)	
MTH104 ✓	Calculus and Analytic Geometry	3(3, 0)	
CSC103 ✓	Introduction to Computers and Programming	4(3, 1)	
		17(15, 2)	

Semester 2		Credit Hours	Prerequisite(s)
Course Code	Course Title		
HUM111 ✓	Pakistan Studies	3(3, 0)	
EEE231	Electronics I	4(3, 1)	EEE121
MTH105 ✓	Multivariable Calculus	3(3, 0)	MTH104
CSC102 ✓	Discrete Structures	3(3, 0)	
HUM102 ✓	Report Writing Skills	3(3, 0)	HUM100
CSC241	Object Oriented Programming	4(3, 1)	CSC103
		20(18, 2)	

Semester 3		Credit Hours	Prerequisite(s)
Course Code	Course Title		
HUM103 ✓	Communication Skills	3(3, 0)	HUM100
CSC271	Database Systems	4(3, 1)	CSC103
EEE241 ✓	Digital Logic Design	4(3, 1)	CSC102
MTH242 ✓	Differential Equations	3(3, 0)	MTH105
CSC211	Data Structures	4(3, 1)	CSC103
		18(15, 3)	

Semester 4		Credit Hours	Prerequisite(s)
Course Code	Course Title		
CSC291	Software Engineering-I	3(3, 0)	
CSC221 ✓	Computer Organization and Assembly Language	4(3, 1)	CSC103
MGT101 ✓	Introduction to Management	3(3, 0)	
MTH262 ✓	Statistics and Probability Theory	3(3, 0)	MTH105
MTH231 ✓	Linear Algebra	3(3, 0)	MTH105
CSC201 ✓	Design and Analysis of Algorithms	3(3, 0)	CSC103
		19(18, 1)	

Semester 5		Credit Hours	Prerequisite(s)
Course Code	Course Title		
CSC253	Computer Graphics	3(2, 1)	CSC103





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CSC322	Operating Systems Concepts	3(3, 0)	CSC211
CSC392	Software Engineering-II	3(3, 0)	CSC291
EEE440	Computer Architecture	3(3, 0)	CSC221
CSC339	Computer Communication & Networks	4 (4, 0)	
		16(15, 1)	

## Semester 6

Course Code	Course Title	Credit Hours	Prerequisite(s)
CSC336	Web Engineering	4(3, 1)	CSC103
CSC312	Automata Theory	3(3, 0)	CSC102
MGT131	Financial Accounting	3(3, 0)	
	Elective CS - I	3(3, 0)/4(3,1)	
MTH375	Numerical Computations	3(3, 0)	MTH231
		16-17(15, 1-2)	

## Semester 7

Course Code	Course Title	Credit Hours	Prerequisite(s)
CSC462	Artificial Intelligence	3(2, 1)	CSC103
CSC441	Compiler Construction	4(3, 1)	CSC312
CSC456	Human Computer Interaction	3(3, 0)	
	Elective CS - II	3(3, 0)/4(3,1)	
CSC499**	Final Year Project (Part-I)	2(0, 2)	
		15-16(11, 4-5)	

## Semester 8

Course Code	Course Title	Credit Hours	Prerequisite(s)
HUM220	Introduction to Psychology	3(3, 0)	
	Elective Institutional - I	3(3, 0)	
	Elective Institutional - II	3(3, 0)	
CSC499	Final Year Project (Part-II)	4(0, 4)	
		13(9, 4)	
	Total	134-136(116,18-20)	

Grand Total: 134-136 Credit Hours

### Note:

- In a semester system, courses are normally defined in terms of credit hours. Some courses have further subdivision into theory and lab work. One credit hour of theory is normally equal to one lecture hour in the class room per week per semester. One credit hour of lab work, however, is equivalent to three contact hours in the lab per week per semester.
- Courses with prerequisites can only be registered if the prerequisite courses have been passed.
- \*\* Project-I: Project is registered and is shown as IP for Student until the project is completed

## Elective Courses

### For BS (CS)

More Courses may be added:

Course Code	Course Title	Credit Hours	Prerequisite(s)
CSC302	Multimedia Authoring	3(3, 0)	
CSC303	Multimedia Documents and Publishing	3(3, 0)	
CSC304	Multimedia Entertainment and Gaming	3(3, 0)	
CSC306	Media Theory, DVD and Compositing	3(3, 0)	





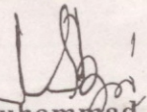
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Elective: Institutional Courses  
More Courses may be added:

Course Code	Course Title	Credit Hours	Prerequisite(s)
MGT350	Human Resource Management	3(3, 0)	MGT101
MGT403	Entrepreneurship	3(3, 0)	MGT101
MGT463	Productivity and Quality Management	3(3, 0)	MGT101
MGT513	New Product Development	3(3, 0)	
CSC104	Introduction to ICT	3(3, 0)	
HUM220	Introduction to Psychology	3(3, 0)	
	Foreign Languages		
HUM430	French	3(3, 0)	
HUM431	German	3(3, 0)	
HUM432	Arabic	3(3, 0)	
HUM433	Persian	3(3, 0)	

Note: The above semester plan is for guidance only; a campus may offer courses according to their needs/resources, keeping in view the pre-requisite requirements.

  
(Dr Muhammad Azim)  
Director Academics

**Distribution:**

1. All Directors CIIT System
2. Dean Faculty of Information Sciences and Technology
3. Controller of Examinations, CIIT
4. Chairman, Department of Computer Science, CIIT
5. All HoDs / Incharges in the department of Computer Science
6. Additional Registrar (Academics)

**CC:**

- i. Registrar CIIT
- ii. PS to Rector

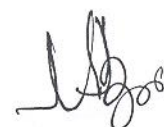




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CSC308	Advanced Website Authoring	3(3, 0)	
CSC310	Entertainment and Interactive Technologies	3(3, 0)	
CSC330	E-Commerce	4(3, 1)	
CSC334	Distributed Computing	4(3, 1)	CSC103
CSC330	Digital Image Processing	3(3, 0)	
CSC332	Network Security	3(3, 0)	
CSC333	Applied Networking	3(1, 2)	CSC339
CSC536	Web Technologies and Programming	3(2, 1)	CSC103
CSC341	Network Programming	4(3, 1)	CSC103
CSC343	Network Design and Implementation	3(3, 0)	
CSC344	Wireless and Mobile Computing	3(3, 0)	
CSC345	Ubiquities and Pervasive Computing	3(3, 0)	
CSC350	Internet Protocols	3(3, 0)	
CSC352	Problem Solving Techniques	3(3, 0)	
CSC353	Information Systems Modeling and Design	3(3, 0)	
CSC355	Open Source Server Administration	3(3, 0)	
CSC357	Learning Management Systems	3(3, 0)	
CSC361	IS Physical Design and Implementation	4(3, 1)	
CSC373	Management Information Systems	3(2, 1)	
CSC402	E-Commerce Policy and Practices	3(3, 0)	
CSC412	Cryptography	3(3, 0)	CSC339
CSC421	Systems Programming	3(3, 0)	CSC103
CSC442	Principles of Programming Languages	3(3, 0)	CSC241
CSC443	Scripting Languages	3(3, 0)	CSC336
CSC444	Visual Programming	3(3, 0)	CSC103
CSC445	Modern Programming Languages	3(3, 0)	CSC241
CSC446	Advanced Object Oriented Programming	3(3, 0)	CSC241
CSC451	Multimedia & Hypermedia System	3(3, 0)	CSC339
CSC452	Virtual Reality	3(3, 0)	CSC253
CSC454	Computer Animations	3(3, 0)	CSC253
CSC455	Computer Vision	3(3, 0)	CSC253
CSC461	Neural Networks	3(3, 0)	CSC462
CSC471	Distributed Database System	3(3, 0)	CSC271
CSC482	Computer Law	3(3, 0)	
CSC494	Software Project Management	3(3, 0)	CSC392
CSC495	Enterprise Resource Planning	3(3, 0)	
CSC496	Business Process Reengineering	3(3, 0)	CSC291
CSC536	Web Technologies and Programming	3(3, 0)	
CSC552	Virtual Reality for Entrepreneurship	3(3, 0)	
CSC559	Mobile Database Systems	3(3, 0)	
CSC571	Distributed Database Systems for Business	3(3, 0)	
CSC573	Business Management Information System	3(3, 0)	
CSC581	Business System Development	3(3, 0)	
CSC582	Legal Framework for IT businesses	3(3, 0)	
CSC593	Information Systems Engineering	3(3, 0)	
CSC595	Business Enterprise Resource Planning	3(3, 0)	
CSC596	Software Requirement Engineering	3(3, 0)	
BIO310	Bio-Informatics-I	4(3, 1)	
BIO312	Bio-Informatics-II	4(3, 1)	

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