File Ref.No.6912/GA - IV - J1/2013/CU

UNIVERSITY OF CALICUT

Abstract

Scheme and Syllabus of M.Sc Computer Science for the affiliated colleges under CUCSS-PG-2010 - corrections incorporated in the syllabus- implemented with effect from 2014 admissions -orders issued.

G & A - IV - J

U.O.No. 5502/2016/Admn Dated, Calicut University.P.O, 28.04.2016

Read:-1)U.O.No.GAIV/J1/1373/08 dated 23.07.2010.

2)GA IV/J1/4639/10 Dt 14.09.2010

3) Item No: 2 of the Minutes of the meeting of BOS in Computer Science on 6.8.14

4) UO No: U.O.No. 9880/2014 Admn 25.10.2014

5) Item No:1 of the minutes of the meeting of BOS in Computer Science on 02.12.15

6) Item 5 in the minutes of the Faculty of Science 15.01.16

7) Item No: II -F of Minutes o the Academic Council 20.02.16

8) Order of the Vice Chancellor in the file of even number on 16.03.16

ORDER

As per paper read as (1) above, Credit Semester System at Post Graduate level in affiliated colleges (CUCSS-PG-2010) was implemented from the academic year 2010 onwards. As per paper read as (2) above, the syllabus of MSc Computer Science for affiliated colleges under CUCSS -PG 2010 has been approved and implemented. The Board of Studies at its meeting, vide paper read as (3) above, revised the syllabus of M.Sc.Computer Science of affiliated colleges. As per paper read as (4) above, orders have been issued, implementing the revised syllabus.

As per paper read as (5) the board of studies has incorporated some correction in the syllabus as follows.

1. Specified that evaluation for CSS4E01 is fully internal.
2. Made minor corrections in the syllabus content for few papers.
3. Evaluation scheme for CSS4C02 is made clear; a sample evaluation is also provided.
4. Added model question papers.

As per paper read as (6) & (7) the Faculty of Science and Academic Council has approved the corrected syllabus of MSc Computer Science. As per paper read as (8) the Vice Chacelleor has approved to implement the items in the minutes of Academic Council.

Sanction has therefore been accorded to incorporate the corrections in the approved syllabus

of M.Sc.Computer Science programme of affiliated colleges under CUCSS PG 2010 w.e.f 2014 admission onwards. Hence the Scheme and Syllabus implemented vide paper read as (5) stands corrected to this effect. Corrigendum is issued accordingly.

(The corrected syllabus is attached herewith and is available in the website: universityofcalicut. info)

Anuja Balakrishnan
Deputy Registrar

To

Controller of Examinations
Exam Wing, Pareekshabhavan
Digital Wing, Calicut University
Principals of Affiliated Colleges

Forwarded / By Order

Section Officer

UNIVERSITY OF CALICUT

THENHIPALAM, CALICUT UNIVERSITY P.O

DEGREE OF

MASTER OF SCIENCE (MSC)

IN

COMPUTER SCIENCE

(CHOICE BASED CREDIT AND SEMESTER SYSTEM)

UNDER THE

FACULTY OF SCIENCE

SYLLABUS

(FOR THE STUDENTS ADMITTED FROM THE ACADEMIC YEAR 2014 – 15 ONWARDS)

BOARD OF STUDIES IN COMPUTER SCIENCE & APPLICATIONS (PG)

THENHIPALAM, CALICUT UNIVERSITY P.O

KERALA, 673 635, INDIA

DECEMBER, 2015

MASTER OF SCIENCE COMPUTER SCIENCE

PROGRAMME STRUCTURE

LEGEND	
Item	**Description**
C	Credits
E	External Component (%)
I	Internal Component (%)
L	Lecture Hours
P	Practical Hours
T	Total

Semester I

No	Course Code	Course Name	C	Weightage			Hrs/wk		
				I	E	T	L	P	T
1.1	CSS1C01	Discrete Mathematical Structures	4	25	75	100	4		4
1.2	CSS1C02	Advanced Data Structures	4	25	75	100	3	2	5
1.3	CSS1C03	Theory of Computation	4	25	75	100	4		4
1.4	CSS1C04	The Art of Programming Methodology	4	25	75	100	2	2	4
1.5	CSS1C05	Computer Organization and Architecture	4	25	75	100	4		4
1.6	CSS1P06	Practical I	4	25	75	100		4	4
		Total	**24**				**17**	**8**	**25**

Semester II

No	Course Code	Course Name	C	Weightage			Hrs/wk		
				I	E	T	L	P	T
2.1	CSS2C01	Design and Analysis of Algorithms	4	25	75	100	3	1	4
2.2	CSS2C02	Operating System Concepts	4	25	75	100	3	1	4
2.3	CSS2C03	Computer Networks	4	25	75	100	4		4
2.4	CSS2C04	Computational Intelligence	4	25	75	100	4		4
2.5	CSS2E05	Elective I	4	25	75	100	4		4
2.6	CSS2P06	Practical II	4	25	75	100		4	4
2.7	CSS2P07*	Term Paper	1	100		100		1	1
		Total	**25**				**18**	**7**	**25**

* Evaluation is to be done fully internally for this paper

List of Elective Courses (Semester II)

No	Course Code	Course Name
2.5a	CSS2E05a	Computer Graphics
2.5b	CSS2E05b	Introduction to Soft Computing
2.5c	CSS2E05c	Web Technology
2.5d	CSS2E05d	Bioinformatics
2.5e	CSS2E05e	Computer Optimization Techniques
2.5f	CSS2E05f	Numerical and Statistical Methods

Semester III

No	Course Code	Course Name	C	Weightage			Hrs/wk		
				I	E	T	L	P	T
3.1	CSS3C01	Advanced Database Management System	4	25	75	100	4	1	5
3.2	CSS3C02	Principles of Compilers	4	25	75	100	4		4
3.3	CSS3C03	Object Oriented Programming Concepts	4	25	75	100	4		4
3.4	CSS3E04	Elective II	4	25	75	100	4		4
3.5	CSS3E05	Elective III	4	25	75	100	4		4
3.6	CSS3P06	Practical III	4	25	75	100		4	4
		Total	**24**				**20**	**5**	**25**

List of Electives for CSS3E04

No	Course Code	Course Name
3.4a	CSS3E04a	Pattern Recognition
3.4b	CSS3E04b	Wireless and Mobile Networks
3.4c	CSS3E04c	Cryptography and Network Security
3.4d	CSS3E04d	Advanced Web Technology
3.4e	CSS3E04e	Virtualisation and Cloud Computing
3.4f	CSS3E04f	Data Warehousing and Data Mining

List of Electives for CSS3E05

No	Course Code	Course Name
3.5a	CSS3E05a	Data Compression
3.5b	CSS3E05b	Pervasive Computing
3.5c	CSS3E05c	System Security
3.5d	CSS3E05d	Molecular Simulation and Modeling
3.5e	CSS3E05e	Fundamentals of Big Data
3.5f	CSS3E05f	Web Engineering

Semester IV

No	Course Code	Course Name	Credit	Weightage I	E	T	Hrs/wk L	P	T
4.1	CSS4E01*	Elective IV	4	100		100	4	1	5
4.2	CSS4C01*	Principles of Software Engineering	2	100		100	2		2
4.2	CSS4C02	Project Work (Duration of the Project = 16 Weeks)	8	25	75	100			
		Total	**14**						
		Total Credits (Sem I – IV)							**87 Credits**

*Evaluation is to be done Internally for these papers (by providing 25% weightage for continues assessment and 75% weightage for the internal examination)

Note:-

- Evaluation for CSS4C01 and CSS4E01 is to be carried out as follows:
  - 25% weightage for the following components:

Components for Continuous Evaluation	Weightage
Test papers with at least 25% questions based on problems or programs (minimum two)	2
Assignments (minimum two) such as homework, problem solving, group discussions, quiz, literature survey, term-project, software exercises, etc.	1
Regularity in the class	1
Seminar	1
Total	**5**

  - 75% weightage for the End Semester Examination which is to be conducted by the concerned department. Question papers for the examinations are to be prepared in the format specified for university examinations with 36 weightage.
  - Suppose that a student got 3.5 points for the components of continuous evaluation and 3.0 points for the End Semester Examination. The total grade point is to be calculated as follows: (1 X 3.5 + 3 X 3.0)/4 = 3.13.