Department of Computer Science and Engineering
National Institute of Technology Calicut
NIT Campus (PO), Calicut-673601, India

DCC Meeting Minutes

Date: 06/03/2023   **Time: 12:20 PM to 1:00 PM**   **Venue/Mode: APJ Hall/Offline**

Agenda Items:

1. Ratification of the minutes of the DCC meeting held on 09/02/2023
2. Action Taken Action Pending Report of the last DCC meeting
3. UG Curriculum Revision
4. Requests from two S6 MCA Students for Internship in Industry

The DCC meeting started at APJ Hall, CSED at 12:20 PM. The Chairperson welcomed all members to the meeting.

Agenda Item 1:   Ratification of the minutes of the DCC meeting held on 09/02/2023

The DCC ratified the confirmation of the minutes of the DCC meeting dated 09/02/2023.

Agenda Item 2: Action Taken Action Pending Report.

There are no actions pending and no actions to be taken, as per last DCC meeting.

Agenda Item 3: UG Curriculum Revision

The proposed curriculum (Annexure I) prepared after two deliberations and discussions in faculty meetings was presented in the DCC for discussion and approval. The changes from the previous curriculum in terms of core CSE courses were discussed and the changes approved. The proposed titles and codes for the programme core courses, CSE department's choices for Science courses in Institute Core (IC) and Entrepreneurship-Innovation (EI) elective basket, were also approved after discussion.

The DCC proposed that the students may be provided the flexibility to credit Project (3cr) , Term Project (3 cr) and Major Project (6 cr) together in the same semester (S7 or S8).
The advantage of this flexibility are:
1. a student can take the load of all the projects and do the work outside the institute in a semester
2. a student can take the load of all the projects in a semester enabling a deep and focussed attention to a problem, including a research problem; the work can be in the institute or outside.

09/03/23

The DCC entrusted the HOD to present this proposal in BoAC for consideration. The curriculum framework with the distribution of courses in 8 semesters was approved by the DCC and is attached.

The DCC of CSED placed on record the appreciation of the work done by the UG Institute Curriculum Committee in extending the freedom to offer department specific courses to the B.Tech students from the first semester itself. The HOD also appreciated the efforts of the members of the Department UG Curriculum committee.

Agenda Item 4: Requests from two S6 MCA Students for Internship in Industry

Dr M Prabu, Faculty Advisor of S6 MCA students, presented the requests from two MCA students (Annexure II) of S6, asking for permission to do an internship in the industry and DCC granted the permission to forward the requests to the concerned higher authorities.

The meeting ended at 01:00 PM , 06-03-2023.

09/03/23

Curriculum for B.Tech CSE (2023 Admission onwards)
Recommended by DCC on March 6. 2023

Distribution of credits to the different curriculum baskets

Programme Core (PC) + Programme Electives (PE) *Courses <u>decided</u> by the Dept. The core and elective distribution is left to the respective departments. No core courses in 4th year*	80-82 ***CSE 82***
Open Electives (OE) *Courses <u>within the Dept/Other Departments</u>/approved on-line platforms with a cap on the maximum courses from such platforms decided by the Institute from time to time*	24–27 ***CSE 24***
Institute Core (IC) *(Course contents can be programme-specific; to be completed by fourth semester)Maths-12, Prof. Communication-3, Prof. Ethics-1* *Physics/Chemistry/Life Sciences (Any two can be decided by the Departments concerned)* ***CSE: Physics and Life Science***	**22** 16 06
Institute Elective (IE) ***Entrepreneurship / Innovation Basket (EI):*** *Courses to be <u>proposed</u> by the Department and approved by Institute Innovation Council* ***Digital / Automation Technologies (DA):*** *Courses <u>offered/identified</u> by the Department - relating to programming / automation tools & techniques / Industry 4.0* ***Humanities, Social Science, Management (HM)*** *Indian and Foreign languages, Economics, Engineering Management, Financial Management, Design Thinking etc.*	**18** 3 6 9
Activity Credits (AC)	**04**
Total Credits	150-153 ***CSE 150***

[signature] 09/03/23

Department of Computer Science and Engineering
National Institute of Technology Calicut
NIT Campus (P O), Calicut- 673 601, India.

Curriculum for B.Tech CSE
(2023 Admission onwards)
Recommended by DCC on March 6. 2023

Semester-I

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	MA1xxxE	Mathematics I				3	IC
2.	BT1xxxE	Biology for Engineers				3	IC
3.	MS1001E	Professional Communication				3	IC
4.	CS1001E	Computer Programming	3	0	0	3	PC
5	CS1002E	Introduction to Computing	3	0	0	3	PC
6	CS1003E	Discrete Structures I	3	0	0	3	PC
7	CS1091E	Programming Laboratory	0	0	3	2	PC
	Total Credits					20	

Semester-II

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	MA1xxxE	Mathematics II				3	IC
2.	PH1001E	Physics of Materials				3	IC
3.	CS1011E	Program Design	3	0	0	3	PC
4.	CS1012E	Logic Design	3	0	0	3	PC
5.	CS1013E	Discrete Structures II	3	0	0	3	PC
6.	CS1092E	Program Design Laboratory	1	0	3	3	PC
	Total Credits					18	

Semester-III

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	MA2xxxE	Mathematics III				3	IC
2.	CS2001E	Data Structures & Algorithms	3	0	2	4	PC
3.	CS2002E	Computer Organization	3	0	2	4	PC
4.	CS2009E	Innovation and Design Thinking	3	0	0	3	EI
5.	CS2091E	Data Structures & Algorithms Lab	1	0	3	3	PC
6.	CS2092E	Hardware Laboratory	1	0	3	3	PC
	Total Credits					**20**	

Semester-IV

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	MA2xxxE	Mathematics IV				3	IC
2.	CS2011E	Database Management Systems	3	0	2	4	PC
3.	CS2012E	Operating Systems	3	0	2	4	PC
4.	CS2013E	Theory of Computation	3	0	0	3	PC
5.	CS2019E	Professional Ethics	2	0	0	1	IC
6.		DA Elective - 1				3	DA
7.		Minor Course - 1				3#	MC
	Total Credits					**18 (+3#)**	

Semester-V

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	CS3001E	Computer Networks	3	0	2	4	PC
2.	CS3002E	Compiler Design	3	0	2	4	PC
3.	CS3003E	Design & Analysis of Algorithms	3	0	2	4	PC
4.		Humanities Elective - 1				3	HM
5.		DA Elective - 2				3	DA
6.		Minor Course - 2				3#	MC
	Total Credits					**18 (+3#)**	

Semester-VI

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	CS3011E	Software Engineering	3	0	2	4	PC
2.	CS3012E	Artificial Intelligence	3	0	2	4	PC
3.		Humanities Elective - 2				3	HM
4.		Open Elective - 1				3	OE
5.		Open Elective - 2				3	OE
6.	CS3099E	Project				3	PC
7.		Minor Course - 3				3#	MC
	Total Credits					**20 (+3#)**	

Semester-VII

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.		Humanities Elective - 3				3	HM
2.		Open Elective - 3				3	OE
3.		Open Elective - 4				3	OE
4.		Open Elective - 5				3	OE
5.		Open Elective - 6				3	OE
6.	CS4097E	Summer Internship				2	PC
7.	CS4098E /	Term Project / Programme Elective - 1				3	PE
8.		Minor Course - 4				3#	MC
	Total Credits					**20 (+3#)**	

Semester-VIII

Sl. No.	Course Code	Course Title	L	T	P	Credits	Category
1.	CS4099E /	Major Project / Programme Elective - 2, Programme Elective - 3				6	PE
2.		Open Elective - 7				3	OE
3.		Open Elective - 8				3	OE
4.		Activity Credits (minimum of 80 points)				4	AC
	Total Credits					16	

The courses of seventh and eighth semesters may be interchanged to facilitate external internships. Projects in S7 and S8 can both be internships.

Minimum Credits for the award of the degree: 150
IC – **22**, PC - **73**, PE – **9**, OE – **24**, IE –**18** (EI- **3** HM – **9** DA – **6**), AC – **4**

CORE COURSE COMPARISON
Proposed (2023) vs Existing (2017) Curriculum

2023 Curriculum	2017 Curriculum
Programming, Algo. and Software Design. Computer Programming - 3 Programming Laboratory - 2 Program Design - 3 Program Design Lab - 3 Data Structures and Algorithms - 4 Data Structures Lab - 3 Software Engineering - 4 Design and Analysis of Algorithms - 4 Introduction to Computing - 3 **29**	**Programming, Algo. and Software Design** Computer Programming - 2* [as Basic Engg] Program Design - 4 Programming Lab - 3 Data Structures and Algorithms - 4 Data Structures Lab - 3 Software Engineering - 4 **20**
Theory Discrete Structures I - 3 Theory of Computation - 3 Discrete Structures II - 3 **9**	**Theory** Discrete Structures - 4 Theory of Computation - 4 **8**
Hardware Logic Design - 3 Computer Organization - 4 Hardware Laboratory - 3 **10**	**Hardware:** Logic Design - 4 Computer Organization - 4 Hardware Laboratory - 3 Logic Design Laboratory - 2 **13**
Systems Operating Systems - 4 Compiler Design - 4 Database Management Systems - 4 Computer Networks - 4 **16**	**Systems** Operating Systems - 4 Compiler Design - 4 Database Management Systems - 4 Computer Networks - 4 **16**
Data Science Artificial Intelligence - 4 **4**	**Data Science** Artificial Intelligence - 4 **4**
Projects Summer Internship - 2 Project - 3 Term Project *or* one Program Elective - 3 Major Project *or* two Program Electives - 6 **5+9**	**Projects** Project 1 - 3 Project 2 - 8 **11**
73 PC 9 PE (projects or electives) **Total PC+PE = 82**	70+2* =72 (above) 7 theory & 2 lab dept electives = 30-32 (approx.) **Total PC+DE = 102-104**

Distribution of Credits in Various Course Categories as Proposed in CSE curriculum:

IC – **22**, PC + PE – **82**, OE – **24**, IE –**18** (EI- **3** HM – **9** DA – **6**), AC – **4**   **Total - 150**

<u>Note:</u> In 2017, PC+DE-102, OE-6, OT-6, MA-12, BS-10, HL-9, BE-15; Total - 160

Annexure II

Details of the S6 MCA Students requested for Internship in the Industry:

S.NO	Roll No	Name	Company	Internal Guide
1	M200719CA	Shubhi Verma	SAP Labs	Dr. Majusha K
2	M200698CA	Keshav	Nextuple	Sreenu Naik Bhukya

09/03/23