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

<u>Minutes of the DCC Meeting on 6th September 2017</u>

Venue : CSE 202   Time : 12.20 pm

The department consultative committee, as directed by the Senate, decided to conduct a review of the proposed B.Tech CSE curriculum. The question to be addressed was:

Whether the department's proposal of integrating practical component with theory in courses, resulting in 4 credit core and elective courses (3 lecture + 2 practical) needs to be modified?

The department decided to consult the alumni and accordingly a questionnaire [1] was prepared and circulated among several members of the alumni in industry / academia.

The feedback was completely in favour of combining theory and practical components into a single course and accordingly was favourable to the original curriculum plan of having 4 credit courses integrating theory and practical components.

Review meetings conducted on 17th August, and 6th September discussed the issue along with alumni feedback. The conclusions arrived at were finalised and approved on September 6, 2017 as noted below:

1. The present CSE curriculum in which courses integrate practical components with theory is well received by the industry, as clearly demonstrated by placement statistics. Moreover, the reception in academia as well is healthy and a notable number of students are admitted to premier academic institutions in India and abroad for higher studies. Hence the department unanimously resolved to retain the strong points of the current curriculum in the proposal.

2. The recruitment process of CSE graduates is unique in that practical skills are tested at all levels of the selection process. Consequently, without integrating theory with practice, CSE students would not be successful professionally. The placement prospects of the students would also be adversely affected if the strengths of proposed curriculum model are removed.

3. Since computer science graduate engineers join the software industry as primary developers and not as supervisors, professional survival of computer science students is crucially dependent on their proficiency with software development practice as applicable to each course in the curriculum.

4. In many subjects relating to systems / software development, the theory content illustrates how software tools for various systems are developed whereas the practical component stresses on the use of these tools for actual software development. Typically, the theory content focuses on the mathematical theory of various automation tools used in the field whereas the practical component

stresses on using tools available for actual software development. Understanding both the theory and the usage of tools is crucial for professional success. Students who have just theoretical knowledge without hands-on experience would require further "finishing schools" to be fit for industry absorption.

5. The DCC also noted that the proposed curriculum does not violate the guidelines given by the B.Tech Curriculum Committee as approved by the Senate.

6. The Department also resolved to reduce the credits of some of the courses with less practical content to address the concern raised by the Senate. Department decided,if needed, to reduce the credits of 16 elective courses from 4 credits to 3 credits by either reducing the content or by removing the practical component. These courses are listed below.

SI.No.	Course Code	Course Title	Pre requisites	L	T	P	Credits
1	CS4024 D	Information Theory	NIL	3	0	0	3
2	CS4025 D	Randomized algorithms	NIL	3	0	0	3
3	CS4028 D	Quantum Computation	NIL	3	0	0	3
4.	CS4029 D	Topics in Complexity	NIL	3	0	0	3
5.	CS4048 D	Mathematical Foundations of Machine Learning	NIL	3	0	0	3
6.	CS4051 D	Coding Theory	NIL	3	0	0	3
7.	CS4053 D	Topics in Logic	NIL	3	0	0	3
8.	CS4055 D	Parameterized Complexity Theory	NIL	3	0	0	3
9.	CS4059 D	Topics in Computational Geometry	NIL	3	0	0	3
10.	CS4063 D	Topics in Cryptography	NIL	3	0	0	3
11.	CS4065 D	Formal Semantics	NIL	3	0	0	3
12.	CS4068 D	Introduction to DNA Computing Models	NIL	3	0	0	3

13.	CS4069 D	Hashing Techniques for Big Data	NIL	3	0	0	3
14.	CS4070 D	Topics in Computer Networks	NIL	3	0	0	3
15.	CS4071 D	Network Analysis in Bioinformatics	NIL	3	0	0	3
16.	CS4030 D	Computational Complexity	NIL	3	0	0	3

Encl:

1. Feedback received from Alumni - sample copies.
2. Revised Curriculum.

Name and Signature of the members present:

Sl. No.	Name	Signature	Sl. No.	Name	Signature
1	Vinod P	*(signature)*	11		
2	K. Murali Krishnan	*(signature)*	12		
3	Anu Mary Chacko	*(signature)*	13		
4	R. SUBASHINI	*(signature)*	14		
5	SUBHASREE M.	*(signature)*	15		
6	SUDEEP. KS.	*(signature)*	16		
7	Vineeth Pairs	*(signature)*	17		
8	Priya Chandran	*(signature)*	18		
9	SD Madhu lama	*(signature)*	19		
10	Saidalavi Kalady	*(signature)*	20		