

File No:	CU/CSE/QIP/2019_20/01		
Date:	20 <sup>th</sup> to 24 <sup>th</sup> May 2019		
Time:	9:00 AM – 4:30 PM		
Venue:	Seminar Hall, 2 <sup>nd</sup> Block, Kengeri Campus		
No. of Faculty Members Attended:	40		
Title:	"Teaching Pedagogy and Evaluation Process in		
	Outcome Based Education"		
Objective:	Outcome Based Education		
	Machine Learning using Matlab		
	2. Teaching Pedagogy – Case Studies		
Outcomes:	3. Preparation for NBA accreditation		
	4. Preparation of Course Plan for effective Teaching and		
	Learning.		

#### **Schedule:**

Date	Session – 1	Session - 2	Session – 3	Session – 4	
Timing	9.00am – 10.30am	10.45am – 12.15pm	01.30pm – 3.00pm	3.15pm – 4.45pm	
20.05.2019	Introduction to MathWorks <b>Mr. Pramod</b> <b>Kumar Naik</b>	Neural Networks using MATLAB Mr. Pramod Kumar Naik	Machine Learning for Computer Vision Applications Mr. Manisankar P	Deep Learning for Mr. Manisankar P	
21.05.2019	Case Study – An Effective Teaching Methodology Mrs. Merin Thomas	Case Study – An Effective Teaching Methodology Mr. Bijeesh T V	Hands On Session on Case Study Mrs. Merin Thomas	Hands On Session on Case Study Mr. Bijeesh T V	
22.05.2019	Insights on Self Assessment Report for NBA  Dr. Tiruvengadam & Team, TCE, Madurai				
23.05.2019	Preparation of Course Plan with respect to Outcome Based Education	Preparation of Course Plan with respect to Outcome Based Education	Preparation of Course Plan with respect to Outcome Based Education	Preparation of Course Plan with respect to Outcome Based Education	
24.05.2019	Road Map to NBA Accreditation Dr. M. Balamurugan	Preparation of Course File for OBE Mrs. A.K. Sujatha	Report Preparation		



Day 1: 20<sup>th</sup> May 2019 Time: 9:30 am to 4:30 pm

Topic: Neural Networks, Machine Learning and Deep Learning using Matlab

Speaker: Pramod Kumar Naik (pramod.kn@coreel.com), Senior Application Engineer

@CoreEL Technologies, Bangalore -34.



The session began at 9:30 am with an introduction to the importance of QIP by Dr. K Balachandran. The main objective of the programme is to implement Outcome Based Education with improved Teaching Pedagogies and Evaluation Process.

The 1st session began at 9:40 am by Pramod Kumar Naik with introduction to the CoreEL Technologies. The following topics were covered: Neural Networks followed by Machine Learning (ML), Case Study on Deep Learning, ML applications using MATLAB, Code Development, Deep Learning and Certification Courses (Digital Certificate on Deep Learning and MATLAB).





The session ended at 4:30 pm. The hands on sessions were provided on Machine Learning and Deep Learning applications.



Day 2: 21<sup>st</sup> May 2019 Time: 9:30 am to 4:30 pm

**Topic:** Case Study – An Effective Teaching Methodology

**Speaker:** Merin Thomas and Bijeesh T V, Department of CSE, CHRIST, Bangalore – 74.





The session began with the introduction of case study and also with the definition of the case. A case would compel the students to acquire peripheral information, extended knowledge acquiring and so on. What a case study can be and what it cannot be was discussed and why is case teaching is required was also mentioned. CASE teaching is student centric and realistic, powerful easy to demonstrate concepts and theories and also compel the students take responsibility of their learning.

When to use case study is choice of teacher. Limitation is that the case study based approach id hard to quantify the findings. Traditional pedagogy and case study based teaching was discussed. The case study approach allows in-depth, multi-faceted explorations of complex



issues in their real-life settings. The value of the case study approach is well recognized in the fields of business, law and policy, but somewhat less so in health services research. Based on our experiences of conducting several health-related case studies, we reflect on the different types of case study design, the specific research questions this approach can help answer, the data sources that tend to be used, and the particular advantages and disadvantages of employing this methodological approach.

There were sessions that concentrated on individual cases solved in groups and we had presentation on the same and deliberations on the cases and their consequences.



Study design: Single intrinsic case study

The case: Centered on the issue of recruitment of South Asian people with asthma.

Data collection: In-depth interviews were conducted with asthma researchers from the UK and US. A supplementary questionnaire was also provided to researchers.

Analysis: Framework approach.





Day 3: 22<sup>nd</sup> May 2019 Time: 9:30 am to 4:30 pm

**Topic:** Insights on Self - Assessment Report for NBA **Speaker:** Dr. Tiruvengadam & Team, TCE, Madurai

There was an extensive discussion on the NBA process by 2 professors of Thyagaraja

College Engineering. The points that were deliberated are the following:



- Differences between NAAC and NBA.
- Outcome Based Education (OBE) and its expectations by NBA.
- Three years of data required for NBA accreditation: 2016-17, 2017-18 and 2018-19.
- NBA: total points is 1000.
  - o >600 and <750: 3 years of accreditation
  - >750: more than 6 years of accreditation.
  - o Each criteria should be >60%
  - o Mandatory 1:15 faculty student ratio.
  - o Total 10 criteria
- OBE: Criteria 1, 2, 3 and 7.
- I/O: 4 and 5<sup>th</sup> criteria
- Partly input and partly OBE: 8th criteria
- System Centric: 9 and 10
- Each Mission statement should start with an action verb.





- Certain guidelines to be followed for each course in the curriculum (IEEE).
- Design of co-curricular activities required like MOOC, Leadership, Workshops, and Conferences and so on.
- Course Outcome (CO) –Program Outcome (PO) mapping was explained with an example.
- Was advised not to write COs at K1 (understand level from Bloom's Taxonomy).
- All 10 criteria was discussed in detail.



Day 4: 23<sup>rd</sup> May 2019 Time: 9:30 am to 4:30 pm

**Topic:** Preparation of Course Plan with respect to Outcome Based Education **Speaker:** Dr. Balamurugan M, Department of CSE, CHRIST, Bangalore – 74



- Various Functional Cells and its members were discussed.
- Course Plan and CIA Rubrics Preparation according to NBA template.

Day 5: 24<sup>th</sup> May 2019 Time: 9:30 am to 4:30 pm

Topic: Syllabus Preparation / Modifications suggestions and its entry in KP



BOS clarification was given by Mrs. Merin Thomas, Dr. Balachandran and Dr. Manohar.

Points that were discussed are:

1. The year and syllabus to be followed was clarified as

Course	Year	Academic Year	Remark
B.Tech and M.Tech	4th Year	2016-2017	
	3rd Year	2017-2018	
	2nd Year	2018-2019	
	1st Year	2019-2020	Copy CO and CO-PO mapping from this document and retain in relevant course if the syllabus is unchanged.

- 2. CO-PO mappings should not be changed.
- 3. Course outcomes may be changed only by today after filling the form sent by the CDC team.

The 5 day QIP programme ended with report writing, suggestions in modification of the syllabus required, effective course plan and CIA rubrics document preparation and initiation of NBA process.

Head of the Department Dr. Balachandran K