



NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

(AN AUTONOMOUS INSTITUTE AFFILIATED TO VTU, BELAGAVI)

Academic Year: 2023-24

Subject: Electromagnetics

Subject Code: 22EC44

Semester & Section: 4th B

I handled Electromagnetics (22EC44) course for 4th semester students, which was typically a mathematical subject, hence making a case study was challenging and took time for case study.

The case study: It was observed that the students were regular to the classes, and they were writing the notes during classwork with all the equations and derivations related to electric and magnetic fields. The students were attentive too in the classwork. In the past the students said that some of the subjects were theory, and the subjects were boring due to more theory. Whereas, in the case of electromagnetics, they said that it is fully mathematics and derivations, yet they are attentive and understanding the concepts of Electromagnetic fields. But the students didn't get good scores during the MSE 1 examination.

1. The students said they were bored listening to theory subjects. In contrast, they felt interested in a mathematical subject, whether they are getting significance of the subject?
2. Though the students were attentive and understanding the subject, they weren't able to score in the MSE 1 examination.

Solution approach: In this context, the solution approach can be, every mathematical equation has significant importance in conceptual and real time view. Hence, the significance of the equations can be explained to the students while deriving equations (Coulomb's law). In the similar way the mathematical equations I had derived with significance of equations. Hence, the students understand the importance of equations in real time, and it impacts the students a lot. Subsequently, the students scored good marks in MSE 2, parallelly gained the concepts.

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