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Teaching Portfolio

Teaching philosophy

Teaching is not only transferring of knowledge from the teacher to student but its much more than that. It involves motivating the students towards the subject, listen to their views, learn from their questions, having a dialogue with them, and continuously improving the teaching style based on that.
During my education, I was motivated by the teachers who used to discuss generalized theory, involve students during the lectures by asking questions, and solving exercises. In addition, the new theories discussed during the lectures were discussed using the theories used in earlier lectures or the topics of earlier completed subjects. These were the lectures where I learnt most. I try to follow the same approach while teaching the courses related to my area of specialization, i.e., Power Electronic and Electric Drives.
Power electronics and electric drives are subjects which combines theories from circuit analysis, electromagnetic, and control systems like most of the subjects in electrical engineering. Therefore, I like to start from the basic concepts of circuit analysis, electromagnetics, and control systems to initiate any topic in power electronics and drives. I prefer to focus on the basics of any subject while teaching as I believe that it will help the students in long run since the technology changes every year while the basics remain same. If the basics are strong, the advanced level follows.

Teaching experience

Aalborg University, Denmark
Power Electronic Modeling (Masters) (2012 and 2013) Advanced Topics in PWM forVoltage Source Converters (PhD course) (2014)
Indian Institute of Technology, Delhi, India
Electric Drives (Bachelor) (2016)
Electromechanics (Bachelor) (2016)
Intro. To Electrical Engineering (Bachelor) (2017)
Computer Aided Design and Simulation of Power Electronic System (Masters) (2015)
Power Electronic Converters (Masters) (2015)
Modelling of Electric Machine (Masters) (2017, 2018)
Electric Drives Systems (Masters) (2018)
Power Electronic Converter for Renewable Energy System (Masters) (2019)
Selected and Advanced Topic in Power Electronics (Masters) (2019)
University of Southern Denmark, Denmark
Control of Converters and Converter fed Electromechanics (Masters) (2020)
Modeling and Control of Electric Machines (Masters) (2020, 2021, and 2022)
Control module in Develop Intelligent Dynamic Electronic Systems (Bachelor) (2020 and 2021)
Control Engineering 1 (2022)
Control of Grid Connected Converter (Masters) (2021)
Control of Grid Connected Converter(Masters) (2022)
Electromechanics(Masters) (2022)

Formal pedagogical training

PBL in Engineering and Science-Development of Supervisor Skills 2009