

## BE. Electrical and Electronics Engineering (Part Time)

### Course plan

Electric drives (BEEP185T20) -3<sup>rd</sup> Year/ V Semester

14.07.2021	6 PM to 9 PM	ELECTRIC DRIVES	<b>UNIT-1</b> Introduction to Electric Drives, Basic Concept, Types of Electric Drives, Variable speed drives, requirements, various duty cycles of Electric Drives
21.07.2021	6 PM to 9 PM	ELECTRIC DRIVES	Mechanical Characteristics of Electric Drives, Heating and Cooling of Electric machines
28.07.2021	6 PM to 9 PM	ELECTRIC DRIVES	Rating of Electric motors, Selection of Electric motors for various applications
04.08.2021	6 PM to 9 PM	ELECTRIC DRIVES	<b>UNIT-2 DC DRIVES</b>  Speed control of dc motors - Ward- Leonard scheme. Single phase thyristor converter fed dc drives .  Three phase thyristor converter fed dc drives
11.08.2021	6 PM to 9 PM	ELECTRIC DRIVES	Chopper fed Dc Drives :Time ratio control and current limit control. Four Quadrant chopper configurations
18.08.2021	6 PM to 9 PM	ELECTRIC DRIVES	Closed loop control of DC drives
25.08.2021	6 PM to 9 PM	ELECTRIC DRIVES	<b>UNIT-3</b> <b>Induction motor drives</b> Speed control of three phase induction motors
01.09.2021	6 PM to 9 PM	ELECTRIC DRIVES	AC Chopper fed induction motor drives.

08.09.2021	6 PM to 9 PM	ELECTRIC DRIVES	AC Chopper fed induction motor drives. Static rotor resistance control
15.09.2021	6 PM to 9 PM	ELECTRIC DRIVES	Rotor resistance control, slip power recovery scheme- Scherbius and Kramer drives.
22.09.2021	6 PM to 9 PM	ELECTRIC DRIVES	<b>UNIT-4</b> Synchronous motor drives: Speed control of three phase synchronous motors. VSI fed Synchronous motor drives.
29.09.2021	6 PM to 9 PM	ELECTRIC DRIVES	CSI fed Synchronous motor drives, Cycloconverter fed synchronous motors.
06.10.2021	6 PM to 9 PM	ELECTRIC DRIVES	<b>UNIT-5</b> Digital control and drive applications: Digital techniques in speed control. Microprocessor based control of drives
13.10.2021	6 PM to 9 PM	ELECTRIC DRIVES	Steel rolling mills- selection of drives and control schemes. Paper mills- selection of drives and control schemes
20.10.2021	10.00 AM to 11.30 AM	ELECTRIC DRIVES	Lifts and Cranes- selection of drives and control schemes
27.10.2021	2.00 PM to 3.30 PM	ELECTRIC DRIVES	MCQ Discussion