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| <b>COURSE TITLE</b>        | <b>TE142426: Control of Electric Energy System</b><br>Credits: 2<br>ELECTIVE COURSE  |
| <b>LEARNING OBJECTIVES</b> | Students are able to explain the modelling, control and stability of the electric energy system.   |
| <b>COMPETENCY</b>          | <ul style="list-style-type: none"> <li>• The students have the ability to construct the model of electric energy system.</li> <li>• The students have the ability to explain the controlling methods of electric energy system.</li> <li>• The students have the ability to analyze the stability of electric energy system.</li> </ul>                            |
| <b>SUBJECTS</b>            | <ul style="list-style-type: none"> <li>• Introduction to stability of electric system</li> <li>• Synchronous machines: modelling, steady-state and transient analysis</li> <li>• System components : Transmission and transformer, Power Flow Analysis, Modelling of Excitation System</li> <li>• Modelling, Control and Stability of Thermal Generator</li> </ul> |
| <b>MAIN REFERENCES</b>     | <ul style="list-style-type: none"> <li>• KUNDUR, Prabha: <u>Power System Stability and Control</u>, EPRI, McGraw-Hill, 1994</li> <li>• ELGERD, Olle I. : <u>Electric Energy System Theory : An Introduction</u>, McGraw-Hill, 1971</li> </ul>  |
| <b>OPTIONAL REFERENCES</b> | -  |
| <b>PREREQUISITE</b>        | <ul style="list-style-type: none"> <li>• Linear System Theory</li> </ul>   |