

<b>COURSE TITLE</b>	<b>TE142310: Linear System Theory</b> Credits: 3 Semester: I
<b>LEARNING OBJECTIVES</b>	Students are able to analyze and design controller for linear system.
<b>COMPETENCY</b>	<ul style="list-style-type: none"> <li>• The students have the ability to analyze the continuous and discrete linear system.</li> <li>• The students have the ability to design controller for linear system.</li> </ul>
<b>SUBJECTS</b>	<ul style="list-style-type: none"> <li>• Introduction to feedback control and review of linear algebra</li> <li>• State-space analysis of continuous linear system</li> <li>• Stability analysis of continuous linear system</li> <li>• The relation between State-space and transfer function</li> <li>• State-feedback and output feedback design</li> <li>• Observer and observer state feedback design</li> </ul>
<b>MAIN REFERENCES</b>	<ul style="list-style-type: none"> <li>• Brogan, William.L, <u>Modern Control Theory, 3th Ed, Prentice-Hall International Inc.</u> New Jersey, 1991</li> <li>• C-T. Chen, <u>Linear System Theory and Design, third edition, Oxford University Press,</u> 1999.</li> <li>• Kailath, T.: <u>Linear Systems,</u> Prentice Hall New Jersey 1981</li> </ul>
<b>OPTIONAL REFERENCES</b>	-
<b>PREREQUISITE</b>	-