

COURSE TITLE	TE142327: Electronic Circuit Systems Credits: 3 Semester: II
LEARNING OBJECTIVES	To have an understanding of basic principles of components of intelligent systems, and to have a capability of designing a certain application of the intelligent electronic system.
COMPETENCY	<ul style="list-style-type: none"> • Students are able to analyze and design analog and digital circuits. • Students are able to conduct the experiments on programmable device.
SUBJECTS	<ul style="list-style-type: none"> • Analysis and synthesis of basic transistor circuits • Analysis and synthesis of Op-Amp circuits, • Synthesis on Field Programmable Analog Array (FPAA) • Synthesis on Field Programmable Gate Array (FPGA)
MAIN REFERENCES	<ul style="list-style-type: none"> • Robert Boylestad and Louis Nashelsky, <u>Electronic Devices and Circuit Theory</u>, Prentice-Hall, 2006 • <u>Programmable Logic Design</u>, Xilinx, 2006. • Kevin Shahill, <u>VHDL for Programmable Logic</u>, Addison Wesley, 1996
OPTIONAL REFERENCES	<ul style="list-style-type: none"> • <u>Xilinx Synthesis Technology (XST) User Guide</u>, Xilinx, 2000 • <u>AN10E40 Field Programmable Analog Array</u>, Anadigm, 2000 • Tony R Kuphaldt, <u>Lessons in Electric Circuits</u>, 2007
PREREQUISITE	-