

## FLORIDA STATE COLLEGE AT JACKSONVILLE

## COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	EET 1144
COURSE TITLE:	Solid-State Devices
PREREQUISITE(S):	EET 1035 or EET 1084 and MAC 1105
COREQUISITE(S):	None
CREDIT HOURS:	3
CONTACT HOURS/WEEK:	4
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	3
Laboratory:	1
Other _____:	
FACULTY WORKLOAD POINTS:	3.67
STANDARDIZED CLASS SIZE ALLOCATION:	20

## CATALOG COURSE DESCRIPTION:

This course is an introduction to the solid-state devices and circuits encountered in present day electronic equipment. Devices covered include but are not limited to: diodes, transistors, op-amps, and thyristors.

SUGGESTED TEXT(S):	Floyd, Thomas. <u>Electronic Devices</u> , 6th ed., Merrill New York, N.Y. 1992
IMPLEMENTATION DATE:	Fall Term, 1990 (911)
REVIEW DATE:	Fall Term, 1996 (971) Fall Term, 2002 (20031) Fall Term, 2006 (20071)

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Introduction	15
A. Atomic Structure	
B. Semiconductor Theory	
C. PN Junctions	
II. Diodes and Diode Circuits	15
A. PN Diode	
B. Rectifier Circuits	
C. Rectifier Filters	
D. Clippers	
E. Clampers	
F. Voltage Multipliers	
III. Field Effect Devices	15
IV. Thyristors	15

PROGRAM TITLE: Computer Engineering Technology  
COURSE TITLE: Solid-State Devices  
CIP NUMBER: 0615.040200 (AAS)/1615.040200 (AS)

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

01.0 DEMONSTRATE PROFICIENCY IN COMPUTER SYSTEMS ARCHITECTURE -- The student will be able to:

- 01.01 Draw and explain systems configurations in block detail.
- 01.02 Interpret computer acronyms.
- 01.03 Identify and define priorities and interrupts at system level.
- 01.04 Define and list direct memory access handling systems.
- 01.05 Define functions of advanced memory techniques (e.g. virtual, pipeline, cache).
- 01.06 Troubleshoot a microcomputer system.

02.0 DEMONSTRATE PROFICIENCY IN SOFTWARE FUNDAMENTALS -- The student will be able to:

- 02.01 Load and run operating system software.
- 02.02 Load and run diagnostic software and utilities.
- 02.03 Construct flow charts.
- 02.04 Analyze flow charts.
- 02.05 Identify and define computer languages and their uses.
- 02.06 Write a simple computer program in BASIC.
- 02.07 Analyze firmware concepts.