

University of Arkansas - Fort Smith
5210 Grand Avenue
P. O. Box 3649
Fort Smith, AR 72913
479-788-7000

General Syllabus

ELEG 2903 Digital Systems I

Credit Hours: 3

Lecture Hours: 3

Laboratory Hours: 0

Effective Catalog: 2018-2019

I. Course Information

A. Catalog Description

An introduction to diodes and transistors, gates, binary arithmetic, combinational logic, sequential logic, registers, counters, memory, and computer organization.

B. Additional Information - None

II. Student Learning Outcomes

A. Subject Matter

Upon successful completion of this course, the student will be able to:

1. Describe basic concepts related to computer organization, different types of mathematical logic, and logic gates.
2. Construct AND –OR- INVERT circuits, etc.
3. Describe basic concepts associated with Microprocessor design.

B. University Learning Outcomes

This course enhances student abilities in the following areas:

Analytical Skills

Critical Thinking Skills- The student will identify problems and design solutions using digital circuits.

III. Major Course Topics

- A. Logic Gates
- B. Computer Organization
- C. Design of Circuitry