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

General Syllabus

ELEG 29103 Digital Systems II

Credit Hours: 3 Lecture Hours: 3 Laboratory Hours: 0

Prerequisite: ELEG 29003 Digital Systems I

Effective Catalog: 2018-2019

I. Course Information

A. Catalog Description

A further study into diodes, transistors, gates, binary arithmetic, combination 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 advanced concepts related to computer organization, different types of mathematical logic, and logic gates.
- 2. Design and develop 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:

Communication Skills (written and oral)

Students will read and comprehend information, express ideas effectively in written and spoken form, Students will deliver presentations on a wide variety of topics related to Digital Design.

III. Major Course Topics

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