



Thank you for your interest in the Digital Systems Short-term Certificate. Completion of this certificate will attest that you have achieved advanced skill and training in digital systems and will prepare you for future professional growth in this area. The certificate consists of four rigorous courses:

EET 114 Basic Electronic Measurements

3 Credit Hours

Measurement techniques; types of error in measurement; use of measuring instruments; digital multimeter, function generator, D.C. power supplies, timers and counters, analog and digital storage oscilloscopes and sweep generators. Multi-Sim 8 software is used in this course. Two lecture, two lab hours per week.

EET 231 Digital Logic & Circuits

4 Credit Hours

Number systems, codes, Boolean algebra, Karnaugh mapping, exclusive circuits or arithmetic circuits. Quartus II software is used in this course. Three lecture, two lab hours per week.

EET 251 Digital Systems I

4 Credit Hours

Basic TTL gates, Flip-Flops, clocks, counters, shift-registers, multiplexers and demultiplexers. Three lecture, two lab hours per week.

EET 252 Digital Systems II

4 Credit Hours

Arithmetic Logic Units, memory devices, parallel and serial input-output devices. Analog-to-digital converters, digital-to-analog converters, communication protocols, keyboard decoders and CRT displays. Three lecture, two lab hours per week.

2005-06 Course Offering Schedule

Fall Quarter 2005

EET 114
EET 231

Winter Quarter 2006

EET 114
EET 231
EET 251

Spring Quarter 2006

EET 114
EET 231
EET 251
EET 252

Before You Start

Students entering this program need the following background to be successful:

- Completion of senior-level high school algebra
- Basic computer literacy
- Sinclair placement test results beyond DEV 064 (Fundamentals of Reading) and MAT 101 (Elementary Algebra)
- At least a 2.0 cumulative grade-point average (ongoing students taking the online courses)

For more information about course content or student skill levels, contact Surinder Jain, Chairperson of the Engineering and Electronics Technology Department. Mr. Jain may be reached by phone at 937-512-2721 or by email at surinder.jain@sinclair.edu.

(See next page for more information.)

How to Get Started

Apply for Admission to Sinclair Community College

Complete and submit the online Application for Admission to the Office of Registration and Student Records (indicate that your major will be Engineering & Electronics Technology-AAS). A one-time non-refundable \$20 application fee will be assessed the first time you register for classes. To access the online application, go to the Sinclair web site (www.Sinclair.edu) and Click on **Future Students**.

Take the Sinclair Placement Test

Placement tests are given on-campus in the Testing Center (Room 10-445, phone 937-512-3076). This free computerized, multiple-choice based test assesses a student's writing, math and reading comprehension skills. It is required for all degree-and certificate-seeking students or, if you plan on taking any Math or English course(s) at Sinclair and have no transferable credit. It is not a pass/fail exam and must be taken prior to registering for classes. If you have transferable credit in math, reading and writing from another accredited institution, you may order a copy of the official transcript from that institution and have it mailed directly to Sinclair's Office of Student Records (allow four weeks for receipt/processing of transcript at Sinclair). Please allow approximately two hours to complete the entire test. Calculators and/or any other reference/resource materials are not permitted. Testing Center hours are:

	<u>Fall/Winter/Spring</u>	<u>Summer</u>
Monday through Thursday	9 AM to 8 PM	9 AM to 8 PM
Friday	9 AM to 8 PM	9 AM to 4:30 PM
Saturday	9 AM to 2 PM	Closed

See an Academic Counselor for Advising and Reviewing Test Results

Academic counselors for the Engineering and Industrial Technologies Division are located in room 3142. Call for an appointment (937-512-2282) or email karen.blake@sinclair.edu.

Register for Classes

Sinclair Community College offers a variety of options for students to register:

- Online by going to the Sinclair web site (www.sinclair.edu) and click on **My.Sinclair**
- By phone (937-512-5454 or toll-free at 1-866-512-5454) and follow the prompts
- In person in the Registration office (Second Floor of Building 10)

Students who have completed the prerequisites for the certificate courses may use the online and phone registration options. Students requesting waiver of prerequisites should see an Engineering Academic Counselor.

Pay for Classes

Tuition rates are based on course credit hours and the student's residency as follows:

Montgomery County (OH) residents: \$42.45 per credit hour

Other Ohio County residents: \$69.35 per credit hour

Out of State residents: \$132.00 per credit hour

Tuition payment deadlines are posted in the quarterly schedule of classes and on the college web site. Registrations not paid by the deadline will be cancelled.

Questions??

Contact Karen Blake at 937-512-2282 or email at karen.blake@sinclair.edu.