

Course Number: EET 1150

Course Title: Electronic Circuits I Lab

Course Description:

This lab covers the basics of electronic measurement techniques. Digital multimeters, function generators, and oscilloscopes will be introduced. Tolerance and significant figures will be emphasized. Protoboarding and soldering techniques will be introduced.

Prerequisites: EET 1100 or Concurrent Registration.

Credit hours: 1

Learning Outcomes:

Upon completion of the course students will be able to:

1. Measure voltage, current, and power dissipated for a resistor circuit.
2. Breadboard a circuit from a wiring diagram.
3. Use a signal generator and oscilloscope to perform measurements on a circuit.
4. Apply basic soldering techniques to create a prototype circuit board.
5. Prepare reports analyzing the results of the laboratory exercises.

College of Professional Studies

**EET1150 Electronic Circuits I Lab
Online Syllabus Course Content**

Instructor Information

Please see Professor Profile at the Blackboard instructional site

Course Schedule

Please see the Course Schedule in the Course Syllabus area of the Blackboard instructional site.

Online Course Policies

All of the online courses taken by students are required to follow the policies posted online at <http://online.indianatech.edu/tech-policies/policies/> . Please review the posted policies carefully. If you are unable to abide by the policies listed, please contact the Warrior Information Network (WIN) at 888.832.4742 and request to withdraw from this course

Textbook

Download user manual for BK Precision Power Supply Model 1670 A:

https://cdn.testequity.com/documents/pdf/bk/1670A_manual.pdf

Download user manual for Rigol Digital Oscilloscope Model DS1052E

<https://cdn-shop.adafruit.com/datasheets/Users+Guide+DS1000E.pdf>

Grading Events and Grading Criteria

Unless otherwise specified, all assignments must be submitted via Blackboard.

Course Preparation Quiz – (2.5 % of final grade)

The Course Preparation Quiz is designed to encourage you to review your online course, and will ensure that you understand important course policies and best practices which will help you to be successful. This quiz contains five (5) questions. This is a graded, untimed quiz. You may repeat this quiz as many times as you would like in order to earn a perfect score. *(Please note that each attempt will contain a different set of questions).*

Introductory Labs and short Reports – (19.5% of final grade)

There will be two (2) introductory labs in the course that each count for 10% of your final grade. You must complete the lab assignments and the corresponding short lab reports by the date indicated on the course calendar.

Advanced Labs and Formal Reports – (78% of final grade)

There will be Four (4) advanced labs with formal lab reports in the course that each count for 20% of your total grade. You must complete the lab assignments and a formal written report of your process and results, by the date indicated on the course calendar

Grading Scale

The following grading scale will be assign a grade at the end of the course:

Percentage Achieved	Grade	Percentage achieved	Grade	Percentage achieved	Grade
90% or above	A	70% or above	C	Below 60%	F
80% or above	B	60% or above	D		

Late assignments

All assignments and required online activities are due according to the deadline listed in the course schedule. Granting deadline extension is the courses instructor's autonomy.

Incompletes

If you are unable to complete the requirements for this course due to extenuating circumstances, an Incomplete grade (I) may be granted if you meet the general guidelines stated below.

General Guidelines for submitting a course incomplete request:

- More than 50% of the course session has elapsed.
- The student has encountered an unexpected situation that is beyond his or her control
- The student is
 - in good academic standing --up-to-date on all of the course assignments and has at least an overall passing grade,
 - able to complete all of the remaining coursework within a session (5 weeks for a undergraduate course and 6 weeks for a graduate course) that immediately follows the session the student is currently enrolled, and
 - able to provide support documentations to substantiate the need for extra time should a session is not enough to complete the course requirements.

If an Incomplete is granted, the instructor will set a deadline for all work to be completed. **The deadline cannot go past one (1) session.** All incomplete grades and deadlines are subject to approval by the designated University authority.

Course Related Communication

Online courses are conducted in an accelerated format. Timely communication is very important. When receiving emails from your classmates or instructor, please respond as soon as you can. Students are REQUIRED to use their Indiana Tech email account for all course related communication. The most direct, and effective, way to email your course instructor and classmates is by using the Send Email function within the Blackboard course site. When you use the Send Email function, you automatically receive a carbon copy of the email you sent. In the event when you need to substantiate your claim that you did email your classmates or instructor, you can show that carbon copy to the person(s) who requested it. Please note that

Blackboard only permits you to send email, it does not provide you with the check email function. All of the emails your classmates and instructor send to you will be delivered to your Indiana Tech email account. You are strongly encouraged to check your Indiana Tech email account regularly, preferably several times a week, to minimize the likelihood of miscommunication.

The University policy requires each online course instructor to respond to a student's email within 24 hours. Unless there is an extraneous situation that prevents the instructor from following this rule, you can expect to hear from the instructor within 24 hours. If you don't receive a reply within 24 hours, please do not hesitate to follow up with another email or forward the carbon copy of the email you sent to OnlineSupport@IndianaTech.edu with a note "Please help. It's been 24 hours and I have not heard from my instructor" and the University support staff will act on your behalf to contact your course instructor.