

Piedmont Technical College Course Syllabus

COURSE INFORMATION

Course Prefix/Number: EET 131

Title: Active Devices

Responsible Division: Engineering and Industrial Technology

Last Day to Withdraw from this Course: For the last date to withdraw from this course, consult the current *Student Calendar*.

Course Description:

For course, credit hour, pre-requisite(s) and co-requisite(s) information, visit the Detailed Course Information page: www.ptc.edu/courses/EET131.

Textbook and Other Materials:

For textbook information and additional required and/or supplemental materials, visit the [college bookstore](http://www.ptc.edu/bookstore) (www.ptc.edu/bookstore).

Proctored Examinations:

Proctored examinations for distance learning courses taken at non-PTC campuses may require a proctoring fee for each exam taken.

COURSE POLICIES

Course policies are available online through the *Academic Catalog* and *Student Handbook*. Visit the [Course Policies page](http://www.ptc.edu/syllabus/policies) (www.ptc.edu/syllabus/policies) for a detailed list of important policies and more information.

GRADE POLICY

Detailed grading policy information can be found on the [Grading Policy webpage](http://www.ptc.edu/grading-policy) (http://www.ptc.edu/grading-policy). Final grade appeal information is available in the [Academic Catalog](http://www.ptc.edu/catalog/) (http://www.ptc.edu/catalog/).

ACCOMMODATIONS

Accommodations for ADA:

Information is available on the [Student Disability Services webpage](http://www.ptc.edu/ada) (<http://www.ptc.edu/ada>).

RATIONALE

Why do I need this course?

A thorough understanding of the theory and application of active components used in basic circuits is necessary for the electronic technician to successfully understand higher level circuits utilizing both active and passive devices. The understanding of these circuits will also allow the electronics technician to competently troubleshoot these type of circuits in industry.

PROGRAM INFORMATION

For program information including required courses, program learning outcomes, gainful employment information and advisement information, refer to the Academic Program webpage. Go to [Academics](http://www.ptc.edu/academics) (<http://www.ptc.edu/academics>), select your program, and then select Credentials Offered.

COURSE STUDENT LEARNING OUTCOMES

Upon successful completion of this course and/or clinical, each student will be able to:

- Identify common electrical schematic symbols and state their characteristics.
- Analyze a circuit consisting of resistors, diodes, transistors and similar common components to determine voltages and current flow.
- Troubleshoot a simple circuits to determine malfunctions to the component level.
- Discuss the operation of a simple solid state circuits and the function of its components.

GENERAL EDUCATION COMPETENCIES

Piedmont Technical College General Education Competencies for All Graduates:

This course may address one or more of the following General Education Competencies (assessment will be stated when applicable):

Communicate effectively.

Assessment:

N/A

Apply mathematical skills appropriate to an occupation.

Assessment:

Homework and Exams

Employ effective processes for resolving problems and making decisions.

Assessment:

Laboratory assignments

Demonstrate the basic computer skills necessary to function in a technological world.

Assessment:

Modeling circuits using Multisim

To validate proficiency in the general education competencies, students in some programs will be tested using Work Keys.