

# ELECTRONIC TECHNOLOGY (605)

Information provided includes course descriptions by subject only. For complete 2024-2025 programs/academic plans, please refer to Academic Programs (<http://catalog.blackhawk.edu/academics/>).

## 605-102 Fundamentals of DC Circuits

**Credits:** 1-3

This course is a study of the basic theories, concepts, elements, and principles of DC circuits. The student advances from simple to complex circuits. Topics covered include Ohm's Law, series and parallel circuits, circuit theorems and circuit analysis. The course combines both lecture and laboratory work.

**Aid Code:** 10 - undefined.

**Co-requisites:** 804-113

Complete Course Listing

## 605-106 Analog Circuits

**Credits:** 1-3

This course provides the student with the concepts and fundamental circuit design material to create several types of analog circuits. This course also explores the principles and concepts needed for solid-state devices to operate correctly. Course study includes: the use of solid-state devices such as diodes, transistors field-effect devices, and op-amps. Areas covered include: amplification, comparing, summing, wave shaping, regulating, and oscillation circuits. Analog to digital conversion and several types of integrated circuits are investigated and applied. Characteristics and application of each device type is verified in laboratory experiments.

**Aid Code:** 10 - undefined.

**Pre-requisites:** (605-102)

**Co-requisites:** (605-104)

Complete Course Listing

## 605-106E Analog Circuits ChalExam

**Credits:** 1-3

Complete Course Listing

## 605-405 Principles of Electronics

**Credits:** 0.2-12.8

**Aid Code:** 47 - undefined.

Complete Course Listing

## 605-406 Introduction to Soldering

**Credits:** 0.05-2.4

This course is designed to provide participants with foundational skills in soldering.

**Aid Code:** 47 - undefined.

Complete Course Listing

## 605-419 Introduction to Programmable Logic Controllers

**Credits:** 0.05-10

Participants will study components that make up a programmable or microprocessor system and the various applications and operations used for digital and process controls in industry.

**Aid Code:** 47 - undefined.

Complete Course Listing

## 605-420 PLC Applications

**Credits:** 0.1-9.6

**Aid Code:** 47 - undefined.

Complete Course Listing

## 605-440 Motors & Servo Mechanisms

**Credits:** 0.2-10

**Aid Code:** 47 - undefined.

Complete Course Listing