

**J. Sargeant Reynolds Community College**  
**Course Content Summary**

**Course Prefix and Number: ETR 214**

**Credits: 2**

**Course Title:** Advanced Circuits and New Devices

**Course Description (including lecture hours, lab hours, total contacts)**

Includes lectures and demonstrations on the latest developments in electronics. Lecture 2 hours per week.

**General Course Purpose**

This course is a required course in the Electronics Technology Career Studies Certificate program. It will be used to present current developments in consumer electronics technology.

**Course Prerequisites/Corequisites** (*Entry-level competencies **required** for enrollment*)

Prerequisite: ETR 113 or equivalent; co-requisite: ETR 203 or equivalent.

**Course Objectives**

Upon completing the course, the student will be able to:

- a. identify and discuss recent developments in consumer electronics technology.
- b. describe applications of recent electronics technology developments for residential and commercial use.
- c. discuss advantages, disadvantages, tradeoffs and relative costs of utilizing various electronics technology and systems developments.

**Major Topics to be Included**

The course will cover one or more of the following topics:

- a. Home entertainment systems
- b. Wireless communication systems
- c. Hand-held devices
- d. Stand-alone microcomputer systems, laptops and tablets
- e. Communications networks
- f. Entertainment and office communications media systems
- g. Other pertinent topics as appropriate

**Effective Date of Course Content Summary: May 2009**