BOARD APPROVED: 4/2011

ELECTRONICS III
GRADES 11-12

TECHNOLOGY EDUCATION CURRICULUM SUMMARY

The purpose of the Technology Education Curriculum Summary is to present an overview of the Electronics III curriculum. Parents are the intended audience of the Technology Education Curriculum Summary.

SOLID STATE ELECTRONICS
Review – Electrical Safety Review - AC Theory and Passive Components Review – Instrument Operation Solid State Theory – Semiconductors Diodes DC Power Supplies Transistor Theory – Switching Transistor Amplification Transistor Oscillators Analog Integrated Circuits – Op-Amps and Timers Digital Integrated Electronics – Theory and Applications

APPLIED ELECTRONICS
Electronic Project – Select, construct, test and troubleshoot a Level III project. Design a project to build from scratch. PIC programming (BASIC Stamp, PICAXE, etc.)

ELECTRONIC LAB EQUIPMENT AND USAGE
Power Supplies AC/DC Digital Multimeters Oscilloscope and AF Generator Lab-Volt FACET System CAD and Simulation Software Breadboard Experiment Procedures

CAREER EDUCATION
Career opportunities in the field of electronics Skills necessary for the electronics field Training and educational requirements for electronics career opportunities