ELECTRONICS TECHNOLOGY (ELT)

ELT F101  Basic Electronics: DC Physics
4 Credits
Offered As Demand Warrants
Basic terms and units. Use of test equipment, hand tools and techniques
of soldering. Ohm's law, fundamentals of magnetism, DC circuit analysis,
inductance and capacitance in DC circuits.
Prerequisites: Placement in MATH F054 or TTCH F131.
Lecture + Lab + Other: 4 + 0 + 0

ELT F102  Basic Electronics: AC Physics
4 Credits
Offered As Demand Warrants
Principles of alternating current, vectors, phase relationships, inductive
and capacitive reactance and impedance. AC circuit analysis, series and
parallel resonant circuits, transformers and network analysis.
Prerequisites: ELT F101, MATH F105 (may be taken concurrently).
Lecture + Lab + Other: 4 + 0 + 0

ELT F108  Arithmetic/DC Circuits
3 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 3 + 0 + 0

ELT F109  Arithmetic/AC Circuits
3 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 3 + 0 + 0

ELT F111  FCC Amateur and General Radiotelephone Operator
Licensing
1-3 Credits
Offered As Demand Warrants
An introduction to the study of radio frequency transmission and
receiving will be taught. Basic AC electronics in the radio frequency
ranges will be studied. Some of the circuits studied are oscillators,
modulators, mixers, amplifiers and filters. The classes will include a
hands-on demonstration as part of the lecture. Completion of the class
will give the student the instruction necessary to complete an Amateur
Radio License test and a background for the General Radiotelephone
Operator commercial test (GROL).
Lecture + Lab + Other: 1-3 + 0 + 0

ELT F122  Intro/Electronic Devices
3 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 3 + 0 + 0

ELT F123  Electronic Circuit Fund
3 Credits
Offered As Demand Warrants
Lecture + Lab + Other: 3 + 0 + 0

ELT F171  National Electric Code Study
3 Credits
Offered As Demand Warrants
Systematic study of the National Electric Code and rules governing
minimum requirements for installation of electrical services, feeders and
branch circuits, and requirements for construction and installation of
electrical equipment.
Prerequisites: ELT F102.
Recommended: MATH F105.
Lecture + Lab + Other: 3 + 0 + 0

ELT F246  Electronic Industrial Instrumentation
3 Credits
Offered As Demand Warrants
Methods of analog electronic signal transmission. Discussion of the
details of several pieces of equipment in-depth, providing practice
in establishing correct interconnections. Basic concepts used in
troubleshooting this type of equipment are also introduced.
Prerequisites: ELT F102.
Recommended: DEVM F105.
Lecture + Lab + Other: 3 + 0 + 0