SUBJECTS AND COURSES

COURSE DESCRIPTIONS - INDUSTRIAL ELECTRONICS (ILT)

ILT 194 Intro to Programmable Logic Co
This course provides an introduction to programmable logic controllers. Emphasis is placed on, but not limited to, the following: PLC hardware and software, numbering systems, installation, and programming. Upon completion, students must demonstrate their ability by developing, loading, debugging, and optimizing PLC programs **4 Credit Hours**

ILT 196 Adv Programmable Logic Contrl
ILT-194(Intro to Programmable Logic Co) with a grade of C or higher
This course includes the advanced principals of PLC's including hardware, programming, and troubleshooting. Emphasis is placed on developing advanced working programs, and troubleshooting hardware and software communication problems. Upon completion, students should be able to demonstrate their ability in developing programs and troubleshooting the system. **4 Credit Hours**

ILT 198 Electronic Circuits I
ETC-120(Concepts of Solid State Elec) with a grade of C or higher
This course covers the commonly utilized circuits found in all areas of electronics. These include the various rectifier, filter, voltage regulating circuits, and linear solid-state amplifier circuits. The entire course emphasizes the typical circuits, their principles of operation, and troubleshooting defective circuits. This course has an embedded lab with laboratory exercises designed to develop the skills listed in the Industry competencies. **5 Credit Hours**

ILT 212 PLCs in Automated Systems
ILT-194(Intro to Programmable Logic Co) with a grade of C or higher
PREREQUISITE: As determined by college. NOTE: There is currently no approved standardized plan-of-instruction for this course. This course includes the installation, programming, and networking of PLCs in Automated Systems. Emphasis is placed on the PLC's installation and interaction within an automated system. Upon completion, students should be able to demonstrate their ability in developing PLC networks and troubleshoot the system. NOTE: This course covers either Siemens or Allen Bradley PLCs and HMI panels **5 Credit Hours**

ILT 281 Special Topics: Robotics
AUT-212(Robot Operation & Programming) with a grade of C or higher
This course is designed to allow students an opportunity to study directly-related topics of particular interest which require the application of technical knowledge and technical skills. Emphasis is placed on the application of skills and knowledge with practical experiences. Upon completion, students should be able to solve job related problems using technical skills and knowledge. **5 Credit Hours**