Programmable Logic Controllers II
ELPT 2355

"Northeast Texas Community College exists to provide responsible, exemplary learning opportunities."

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Office Hours	Monday	Tuesday	Wednesday	Thursday	Friday
	4-5 PM	4-5 PM	4-5 PM	4-5 PM	By Appointment

Course Description: Advanced concepts in programmable logic controllers and their applications and interfacing to industrial controls.

Required Textbook(s): Online Subscription to Learnamatrol.com sold in 4, 6, and 12 month durations from the Northeast Texas Community College Bookstore.

Student Learning Outcomes: Convert ladder diagrams into programs; explain digital/analog devise used with programmable logic controllers; apply advanced programming techniques; execute and evaluate control system operation; an implement interfacing and networking schemes.

Student Responsibilities/Expectations:

1. Students are expected to demonstrate Safety in all classes and lab activities.
2. Students must complete ITTC Safety Orientation and OSHA Safety Course before starting their Skills assessment. Student must complete the online Safety Course WXSA105-XX00XEN-E1 - Lockout / Tagout Prior to starting Motor Controls.
3. Students will be taught in a competency-based, self-paced environment with the instructor serving as a learning facilitator.
4. Students will complete both a Quiz covering the objectives contained in the LAPs, and Skills Assessments that demonstrate mastery of the skills taught in the LAPs.
5. In order to be successful, students will complete this course within forty-two (42 weeks).
6. Students must clock in and be present a minimum of 4 hours per week at the ITTC while performing course work.
7. Failure to attend over a two week period without communication with the instructor will result in the student being dropped from the course.
8. A progress review will be provided to all students periodically and counseling will be provided those students who are progressing in a less than satisfactory manner.

Instructional Methods:

The primary method of instruction will be a self-paced facilitator model. The instructor will serve as a facilitator for the student's learning; thus, enabling the student to move at his/her own pace. Learning Activity Packets (LAP), multi-media computer-based learning modules, and practical hands-on activities will be incorporated throughout the course. Classroom presentations will be used infrequently at the instructor's discretion. Self-reviews, skill activities, Quiz assessments, and Skills assessments will be used to evaluate the student's competency.

Instructor – Student Relationship:

Your instructor can be your greatest resource. Your instructor is here to assist you in learning the material and helping you earn the grade you wish to earn in the course. **This is a commitment by your instructor.** Please utilize this resource by contacting your instructor with any matter you feel they can assist you with, both within this class or your college success in general. It is your responsibility to learn the material, but this can often be best accomplished by initiating contact with the instructor on topics you need clarification or further assistance. Please do this!

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Evaluation and Grading Criteria:

Self-reviews and skill activities are a regular part of the Learning Activity Packets intended to enable the student to evaluate his/her own progress. Quiz assessments and Skills Assessments will be used upon the completion of each Module. Course Participation and Safety is earned by displaying safety practices while working at the ITTC a minimum of 4 hours per week.

Grades of A, B, C, D, and F will be determined by the student's achievement of a certain percentage of possible points based on the below listed categories.

Assignments	Percentage
Online Quiz	30%
Skills Assessment	60%
Course Participation and Safety	10%

The letter grade is based on the following Grading Scale:

89.5%-100% = A

79.5%-89.4% = B

69.5%-79.4% = C

59.5%-69.4% = D

0-59.4% = F

Quizzes and Assignments:

Students must complete Quizzes and Hands-on Skills Assessment in all of the following:

- Introduction to PLC Troubleshooting
- PLC Systems Troubleshooting
- Event Sequencing
- Application Development
- Program Control Instructions
- Math and Data Move Instructions

Withdrawal Procedures:

Withdrawal requests <u>MUST BE</u> initiated by the student. Requests for withdrawal become official and effective the date they are received in the records office. Students who stop coming to class (that is, stop participating on the class website) but fail to drop the course will *earn* an "F" for the course.

NTCC Academic Honesty Statement:
"Students are expected to complete course work in an honest manner, using their intellects and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. NTCC upholds the highest standards of academic integrity. This course will follow the NTCC Academic Honesty policy stated in the Student Handbook."

Academic Ethics
The college expects all students to engage in academic pursuits in a manner that is beyond reproach. Students are expected to maintain complete honesty and integrity in their academic pursuit. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. Refer to the student handbook for more information on this subject.

ADA Statement:
It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with John Coleman, Academic Advisor/Coordinator of Special Populations located in the College Connection. He can be reached at 903-434-8104. For more information and to obtain a copy of the Request for Accommodations, please refer to the NTCC website - Special Populations.

Family Educational Rights And Privacy Act (**FERPA**):
The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory

information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.