

## Master Course Syllabus

Department: Engineering Technology

Course Prefix/Number: MET 336

Official Course Title: Industrial Controls

Master Syllabus Approved by Department on: 05 / 11 / 05  
month date year

I. Catalog Description: The theory and application of electronic programmable devices such as programmable logic controllers, temperature controllers, counters, etc. Emphasis is given to control devices using pneumatics and hydraulics. Ladder logic and input/output devices will also be emphasized.

II. Prerequisites: MATH 109

III. Expanded Course Description: This is a course designed for junior level students and will provide a foundation in the application and programming of digital and analog controllers.

IV. Intended Student Learning Outcomes: Upon completion of the course, students will be able to:

1. Identify input and output devices for both digital and analog controllers.
2. Use appropriate programming elements and write and debug programs to control a variety of pneumatically and electrically powered mechanisms.
3. Create programs utilizing and gates, or gates, not and gates, not or gates, latching relays, interlock, interlock clear, step, jump, counters, timers, differentiate up, differentiate down, data move, and sub-routines.

V. Unless otherwise stipulated in this master syllabus by the department, the following items are subject to faculty discretion as described in each faculty member's individual course outline/syllabus:

- a) Course Requirements? (grading/evaluation procedures; class attendance policy; term papers, projects, field assignments; examinations; class participation, etc.)
- b) Required Text(s)?
- b) Bibliography?

VI. Academic Honesty: Cheating, plagiarism (submitting another person's materials or ideas as one's own), or doing work for another person who will receive academic credit are all-impermissible. This includes the use of unauthorized books, notebooks, or other sources in order to secure or give help during an examination, the unauthorized copying of examinations, assignments, reports, or term papers, or the presentation of unacknowledged material as if it were the student's own work. Disciplinary action may be taken beyond the academic discipline administered by the faculty member who teaches the course in which the cheating took place.

VII. Students With Disabilities Policy: It is the policy of Tarleton State University to comply with the Americans with Disabilities Act (ADA) and other federal, state, and local laws relative to the provision of disability services. Students with disabilities attending Tarleton State University may contact the Office of Disability Services at (254) 968-9478 to request appropriate accommodation. Furthermore, formal accommodation requests cannot be made until the student has been officially admitted to Tarleton State University.

Department Head Signature/Date:

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Signature

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Date