

Master Course Syllabus

Department: Engineering Technology **Course Prefix/Number:** MET 4763

Official Course Title: Automated Manufacturing Systems

Master Syllabus Approved by Department on: 08 / 11 / 04
month date year

- I. **Catalog Description:** An analysis of materials flows to design automated manufacturing systems in the manufacturing environment. This will include material handling systems, how computer-aided manufacturing software improves productivity, automated storage and retrieval systems, automated guided vehicles, bar-coding systems, automated warehousing, and the programming and application of robotics.
- II. **Prerequisites:** MET 3363, 3863.
- III. **Expanded Course Description:** The focus of the course is to provide the student with a basic knowledge of the role of manufacturing automation in providing the manufacturer with a technology competitive edge. It deals with the application (not the design) of robots and manufacturing automated systems, including familiarity with automated material handling systems, automated storage and retrieval systems, automated guided vehicle systems, bar-coding systems, automated warehousing systems, computer integrated manufacturing, flexible manufacturing systems, and the application of robotics. A term project, regarding one of the many topics of the course, is researched and presented to the class.
- IV. **Knowledge Outcomes:** Students are expected to have knowledge of the importance and the basics of the following topics; CAD/CAM, CIM, FMS, robotics basics, DFM, and other concepts and practices of Automated Manufacturing Systems. Some depth in a particular topic will be obtained by the student through the term project.
- 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 of 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:

Signature

_____/_____/_____
Date