

Student Outcomes and Performance Indicators – **Faculty Assessment**
 Department of Engineering & Engineering Technology
 College of Professional Studies
 Metropolitan State University of Denver

MET 3330

ROBOTICS FOR MANUFACTURING

Semester/year

Specific, Measurable Student Behavioral Learning Objectives:

Upon completion of this course the student should be able to:

1. Analyze robot design, operation, and function in the industrial logic controlled manufacturing environment.
2. Apply knowledge learned about industrial robots to manufacturing automation in industry.
3. The student will program and design his/her own programs to accomplish specific robotic arm movements to accomplish specific tasks.
4. Design robotic process control features that enhance automation features.
5. Design mechanized parts feeding, handling, and orientation systems essential for many robot applications.
6. Integrate NC/CNC machines, industrial robots, and flexible automation.
7. Analyze and relate industrial logic control systems as controllers for industrial robots.
8. Integrate robots and process control computers to control single robots, work cells, or simplified production line

ABET	Competency Area	Data Collection
c	an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes	
f	an ability to identify, analyze, and solve broadly-defined engineering technology problems	

ADDITIONAL COMMENTS:

PLEASE:

1. MAKE SURE ALL REFERENCES ARE IN Y DRIVE;
2. SAVE THIS FILE UNDER THE COURSE NUMBER, FOR EXAMPLE: CET1000 SPRING 2018.DOC;
3. SEND YOUR REPORT TO LINDA;

 <Name>

 <Date>

Following tables define the Performance Indicators for each of the Student Outcomes a through k

Student Outcomes and Performance Indicators – **Faculty Assessment**
 Department of Engineering & Engineering Technology
 College of Professional Studies
 Metropolitan State University of Denver

ABET c: an ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes				
	Unsatisfactory	Developing	Satisfactory	Exemplary
Select, set up, and use equipment for experiments	Unable to identify proper equipment	Unable to use most of the identified equipment	Able to use the equipment under supervision	Conduct test and measurement properly and safely
Select, set up, and use data collection and analysis software	Not understanding the needs of data collection	Unable to use most of the identified software	Able to use the software under supervision	Properly use of the identified software
Understand the results	Not understanding the results	Some understanding of the results	Understand the results with help	Properly interpret and present the results

ABET f: an ability to identify, analyze, and solve broadly-defined engineering technology problems				
	Unsatisfactory	Developing	Satisfactory	Exemplary
Identify and describe technical problems	Unable to understand problem	Understand the problem but unable to provide solutions	Some solutions or ideas in solving the problem	Proper solution obtained
Recognize standard procedures in solving specific technical problem	Unaware of standard procedures	Realize standard solution procedures but unable to implement	Some solutions are obtained	Properly use standard solution procedure or provide alternate ways of solutions
Manage information and solve technical problems	Unable to gather information needed	Unaware of the importance of managing and documenting information	Some management and documentation of information	Proper documentation and management of information