CPT102 Quality Practices and Measurement Syllabus

Course Information

Credits 3
Campus Washburn Institute of Technology
Address 5724 SW Huntoon
City/State/Zip Topeka, Kansas 66604
Office Fax 785-273-7080

Description
In order to meet a customer’s needs, quality consistent product must be produced. This is accomplished through the knowledge of the equipment operator. Each machine operator determines both the quality and quantity of production from his/her equipment. In this course you will learn basic Quality Practices and Measurements that will enable you to produce high quality products.

Textbooks
Manufacturing Applications ISBN: 0-07-861183-0

Student Learning Outcomes:
A. Communicate effectively
B. Integrate technology
C. Learn effectively
D. Demonstrate cooperative teamwork skills
E. Apply safety in the workplace
F. Think critically and creatively
G. Demonstrate responsible work ethics

Competencies
1. List the elements of an internal quality audit
2. Explain why periodic internal quality audits are a good practice.
3. Calibrate gages
4. Read gages
5. Identify other common data collection equipment in the workplace
6. Calibrate other common data collection equipment in the workplace
7. Read other common data collection equipment in the workplace
8. Identify possible continuous improvements
9. Describe why it is important to inspect materials and product/process at all stages of the manufacturing process.
10. Record instrument readings and the results of quality test
11. Identify quality problems and the possible ramifications.
12. Utilize problem solving/decision making to identify a corrective action
13. Identify corrective action to restore or maintain product quality
14. Identify process trends
15. Record process outcomes information
16. Explain the basic layout of a blueprint
17. Describe the information included in the title block of a blueprint
18. Identify common symbols on blueprints
19. Convert measured values in the inch-pound system to equivalent metric values and vice versa
20. Use a level
21. Use a feeler gauge
22. Use calipers
23. Use a micrometer
24. Use a dial indicator
25. Use a gauge block

Guidelines for Success

Assessment Plan
Assessment is an integral part of the educational process at Washburn Tech and accurate feedback is an important tool in continuously improving the institution’s technical programs. Students can expect to participate in assessment activities prior to entry into programs, within specific courses and following program completion for specific fields of study.

Grading Rational and Grading Scale
A 93 - 100%
B 85 - 92%
C 76 - 84%
D 69 - 75%
F Below 69%

Attendance
This class is offered in part online. Students are expected to complete the online portions both in the classroom and on their own time. Some face-to-face instruction will also be provided. Students are expected to attend at least 90% of the face-to-face learning opportunities.

Make up Policy 1. Make up work is at the discretion of the instructor. 2. Consideration for makeup work will include a review of the student's attendance and academic habits. A consistent demonstration of abuses by a student and he/she will not receive considerations for make-up. 3. All guidelines for number of hours will follow WIT policy.
Disability
The Special Support Services (SSS) Office is responsible for assisting in arranging accommodations and for identifying resources at Washburn Institute of Technology for persons with disabilities. Qualified students with disabilities MUST register and provide documentation with the office to be eligible for services. New requests for accommodations should be submitted two months or more prior to the date services should begin; however, contact the SSS Office as soon as a need may arise. Depending on the accommodation request, four to eight week lead time may be needed for timely and effective provision of services. SSS coordinates and assist in arranging services it deems appropriate of eligible students on a case-by-case basis.

If you are a student with a disability that may substantially limit your ability to participate in this class and believe you will need accommodations, it is your responsibility to contact:

Special Support Services Coordinator
Phone: 785-228-6356
E-Mail: ssscoordinator@washburn.edu