

Bemidji State University

TADT 4878: Quality Assurance

A. COURSE DESCRIPTION

Credits: 3

Lecture Hours/Week: 0

Lab Hours/Week: 0

OJT Hours/Week: *.*

Prerequisites: None

Corequisites: None

MnTC Goals: None

The course teaches the theory and applications of statistical analysis, quality problem solving and implementation. Prerequisites: Junior status or consent of instructor.

B. COURSE EFFECTIVE DATES: 08/22/2016 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

1. Advanced Topics in Quality
2. Benchmarking and Auditing
3. Other variable control charts
4. Probability
5. Process Capability
6. Quality Costs
7. Quality Systems: ISO 9000, Suppliers Certification
8. Quality advocates and Total Quality Management
9. Quality basics
10. Quality control charts for attributes
11. Quality improvement: Problem Solving
12. Reliability
13. Statistics
14. Variable Control Charts

D. LEARNING OUTCOMES (General)

1. solve, apply, and explain central tendency statistical problems
2. describe samples
3. develop pareto charts
4. apply quality tools to solve problems
5. develop cause and effects charts
6. solve, apply, and explain measure of dispersion problems
7. describe population
8. define, apply, and explain variability principle
9. define and discuss quality
10. define, calculate, describe, apply, and explain and describe process capability
11. calculate, describe, apply, and explain upper and lower control limits on control charts and other control charts
12. define events and people in quality
13. define attributes principle
14. use quality tools to problem solve
15. assist Individuals in exploring, assessing, and preparing for careers relating to technology.
16. calculate various probabilities and reliability
17. describe 6 sigma
18. describe Quality Function Deployment
19. describe and apply Design of Experiments (DOE)
20. describe and calculate probability
21. describe and explain Quality Costs
22. describe discuss Quality Systems, Benchmarking and Auditing and the importance and integration of quality concepts
23. develop research skills
24. develop your communication skills
25. develop your critical thinking
26. provide individuals with a strong foundation in leadership, management, and entrepreneurship.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted