

BROOME COMMUNITY COLLEGE  
Binghamton, New York

COURSE TITLE ACCEPTANCE SAMPLING TECHNIQUES SQC 111

CLASS LECTURE HOURS 3 LAB HOURS 0 CREDIT HOURS 3

DIVISION DEAN William Beston

DEPT. CHAIRPERSON Mort Goldberg DATE April 1993

**PREREQUISITE:** MAT 124 Statistics

Learning Objectives of Course:  
Students Should be able to:

1. Explain the difference between attribute and variable acceptance plans
2. Construct an Operating Characteristics curve for an attribute plan
3. Use Dodge-Romig tables to construct LTPD and AOQL lot-by-lot acceptance plan
4. Use MIL-STD 105D to construct AQL lot by lot attribute plan
5. Develop sampling plans using the Wald Sequential Probability Ratio Test
6. Develop lot-by-lot plans for specified producer and consumer risks and AQL and LTPD values and interpret
7. Construct Sequential Sampling plans and Continuous Sampling plans.
8. Construct Acceptance Sampling plans for Variables
9. Use MIL-STD 414 to construct and interpret sampling plans
10. Determine the comparative costs, advantages and disadvantages of various plans

**Catalog Course Description:**

SQC III - A thorough study of acceptance sampling techniques for attributes and variables. Operating Characteristic curves, lot-by-lot acceptance plans based on LTPD, AOQL and AQL. Dodge-Romig, MIL-STD 105D, Sequential Probability Ratio Test (SPRT) sequential sampling, continuous sampling, MIL-STD 414.

# ACCEPTANCE SAMPLING TECHNIQUES

## Course Outline

1. Fundamental concepts in Acceptance Sampling
2. Lot-by-Lot Acceptance Sampling
3. Dodge-Romig Single and Double Sampling
4. AQL Systems for Lot-by-Lot Acceptance using MIL-STD 105D - Single, Double and Multiple Sampling
5. Sampling plans satisfying specified  $\alpha$ ,  $\beta$ , LTPD and AQL values
6. Continuous Sampling plan
7. Sequential Sampling
8. SPRT Techniques
9. Skip-lot Sampling plans
10. Acceptance sampling by Variables
11. A study of OC curves
12. A study of Average Total Inspection (ATI) and Average Sample Number