**Department of Statistics & Operation Research**

**King Saud University**

**Second Semester 1444 H**

**STAT 423 – Quality Control**

Instructor: Prof. Abdulhakim Albabtain Office: AA134 Phone : 4697833

Email : hakim@ksu.edu.sa Office hour: Monday from 11 AM to 1 PM.

**CATALOG DESCRIPTION**

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| **Week** | **Subjects** |
| **1** | Quality control definition and basic concepts: Customer-Driven Definitions of Quality |
| **2** | Quality control definition and basic concepts: PDSA cycle, Process improvement steps |
| **3** | The general theory of control charts & Variables control charts |
| **4** | The Control charts for attributes p and np, C charts |
| **5** | Quality improvement (The Basic Seven) |
| **6** | Acceptance Sampling |
| **7** | Acceptable Quality Level (AQL), Lot Tolerance Percent Defective (LTPD), Operating Characteristic Curve |
| **8** | Average Outgoing Quality & Process Capability |
| **9** | **Midterm** |
| **10** | Process Capability Strategy and Process Performance |
| **11** | Discussion of Student research’s |

**TEXTBOOK**

**Introduction to Statistical Quality Control, by Douglas C. Montgomery. 2020.**

**Grading Please we have announce in Cut clear way for all students from the beginning:**

**Participation, Quizzes & Home works: 10%**

**Midterm: 25%**

**Project: 25%**

**Final Exam: 40%**

**HOMEWORK AND EXAM POLICY**

**Collaboration on homework assignments is encouraged. You may consult outside reference materials, other students, the instructor, or anyone else. There is one restriction: you must write, type, or otherwise record your answers yourself, alone, so that your homework reflects your understanding. No late homework or make-up exams without prior approval; penalties may apply.**