Form (H)
Short course description

Course title: **Quality control**	Course number and code: **STAT 423**
Previous course requirement: **STAT 332**	Language of the course: English
Course level: **8 / Year 4**	Effective hours: 2(2+0+0)

Course description

Quality control definition and basic concepts, Quality improvement, PDSA cycle The general theory of control charts, Variables control charts, The Control charts for attributes, The p and np charts, The Control Chart for Nonconformities, The c and u charts, OTHER VARIABLE CONTROL CHARTS, Individual and moving-range charts Acceptance of sampling, Some sampling plans, Economic Design of Control Charts Average Outgoing Quality (AOQ), Average Outgoing Quality Limit, OC curve

Course objectives

•	Introducing a historical introduction of quality control.
•	Demonstrating its importance by discussing some quality control application.
•	Introducing the development of the science of quality control.
•	Introducing the desirable philosophy and properties of quality control.
•	Introducing the most important concepts of Statistical Process Control (SPC).
•	Introducing the applications of the concepts of SPC.

Learning outcomes (understanding, knowledge, and intellectual and scientific skills)
After studying this course, the student is expected to be able to:

•	Knowledge of the field of Quality Control.
•	Knowledge of assessing production.
•	Knowledge of how to apply SPC
•	Knowledge of finding the best method to measure quality
•	Knowledge of accepting or rejecting lots and samples.

Textbook adopted and supporting references

Title of the book	Author's name	Publisher's name	Date of publication
Statistical Quality Control,	Douglas C. Montgomery	Wiley	2012
Statistical Quality Control	M.S. Mahajan	Dhanpat Rai & Co.	2013
Fundamentals of Quality Control and Improvement	Amitava Mitra	wiley	2016