

Statistics 101 and Statistical Quality Control for Biopharmaceuticals

UMass Dartmouth, Dartmouth, MA

Virtual Course

May 17-19, 2021

Course Description: This course teaches the basic statistical principles, state-of-the-art concepts, advanced tools, and available techniques for statistical process monitoring, quality fault detection, and continuous improvements for wide variety of applications including biomedical and pharmaceutical manufacturing applications.

Instructors: Dr. Wenzhen Huang (UMass Dartmouth), Dr. Bharatendra K Rai (UMass Dartmouth), Dr. Seongkyu Yoon (UMass Lowell).

TARGET AUDIENCE:

Manufacturing Process Engineer, Quality Engineer, Research Scientist, Bioprocess Engineer

COURSE OBJECTIVES:

At the completion of this course, the participant will be able to:

- Discuss and describe quality management philosophies
- Discuss quality improvements with six sigma strategy and DMAIC
- Describe, compute, summarize, and interpret sample statistics of manufacturing process data
- Explain concepts of sampling, sampling distribution, parameter estimation of population
- Understand causes of variability and statistical basis of control charts
- Design, set up, and use CUSUM and EWMA charts
- Understand some recent developments of SPC control chart for specific applications: short run, autocorrelated process and multivariate processes monitoring



REGISTRATION:

Register [here](#)

Cost of attendance is \$2,500; 50% discount for academic and government

BioTnet (Biomanufacturing Training network) is a collaborative training network building workforce training and development solutions for the U.S. biopharmaceutical manufacturing industry. The NIIMBL-supported training network includes UMass Lowell, UMass Dartmouth, MassBiologics, and MIT with industry input from Merck & Co., Pfizer, and Millipore Sigma.

© 2020 The National Institute for Innovation in Manufacturing Biopharmaceuticals. All rights reserved. This project was developed with an award from the National Institute for Innovation in Manufacturing Biopharmaceuticals (NIIMBL) and financial assistance from the U.S. Department of Commerce, National Institute of Standards and Technology (70NANB17H002).

