Hanze University of Applied Sciences Groningen

Course: Statistics/SPC — credits: 3

Course code	WBVH18SSPC
Name	Statistics/SPC
Study year	2022-2023
ECTS credits	3
Language	English
Coordinator	C. Ultzen
Modes of delivery	Education
Assessments	Statistics/SPC - Computer, organised by STAD examinations

Learning outcomes

After finishing this module the student:

- uses descriptive statistics to characterize and analyse datasets and probability distributions
- recognizes and applies the theory of binomial, hypergeometric, Poisson, normal, uniform and exponential distributions
- evaluates the confidence interval for the expectation value and standard deviation of a normal distribution
- uses control charts and calculate process capabilities

Content

In this Statistics and Statistical Process Control (SPC) course we will cover the basics of descriptive statistics and probability theory. We will look at different types of discrete and continuous probability distributions and how to apply them to engineering situations. Confidence intervals for the expectation value and standard deviation are examined. We will use our knowledge in SPC applied to engineering processes.

Included in programme(s)

Mechanical Engineering VWO a 3-year variant

School(s)

Institute of Engineering