

LSTAT2310

2014-2015

Statistical quality control.

4.0 credits 15.0 h + 5.0 h 1q

Teacher(s):	Govaerts Bernadette ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	- Statistical tools for quality insurance - Principles and classes of Shewhart control charts - CUSUM and EWMA control charts - Control charts for autocorrelated and multivariate data - Capability analysis - Decomposition of sources of variability. Gauge analysis Reception sampling
Aims :	At the end of this course, the students will have gain knowledge and a critical view of the statistical tools usefull in the setup of quality insurance policy, in process control and daily follow up of analytical devices. They will be able to apply these tools to industrial data sets.
	The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".
Content :	The themes discussed in this course are: - Statistical tools for quality insurance - Principles and classes of Shewhart control charts - CUSUM and EWMA control charts - Control charts for autocorrelated and multivariate data - Capability analysis - Decomposition of sources of variability. Gauge analysis Reception sampling
Other infos :	Prerequisites Basic course in statistics Reference: D. C. Montgomery, Statistical Quality Control. New York: Wiley, second edition
Cycle and year of study :	> Master [120] in Statistics: General > Master [120] in Statistics: Biostatistics > Master [120] in Biomedical Engineering > Certificat universitaire en statistique
Faculty or entity in charge:	LSBA