| 2 credits | $12.0 \mathrm{~h}+4.0 \mathrm{~h}$ | Q1 |
| :---: | :---: | :---: |


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


| Programmes containing this learning unit (UE) |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Program title | Acronym | Credits | Prerequisite | Aims |
| Master [120] in Agricultural <br> Bioengineering | BIRA2M | 2 |  | $a$ |

