ldats2360

2024

Seminar in data management: basic

4.00 credits	15.0 h + 10.0 h	Q1

Teacher(s)	Bugli Céline ;
Language :	French
Place of the course	Louvain-la-Neuve
Prerequisites	Concepts and tools equivalent to those taught in teaching unit LSTAT2020 Logiciels et programmation statistique de base
Main themes	- Introduction to the SAS system and to SAS/Base programming. - Creation and manipulation of datasets with SAS: importing and exporting datasets, format definition, table merging, variable manipulation, creation and transformation. - Preparation of summary tables, preparation of reports in different formats (txt, html...) - Presentation of the " SAS base programming " certificate.
Learning outcomes	**At the end of this learning unit, the student is able to :** 1 At the end of this course, the student will master the programming in SAS/Base and will be able to apply its skills on big and complicated data sets.
Evaluation methods	The examination of this course consists of a computer-based examination (multiple-choice questions and programming questions, computer-based examination). Students who wish to take the SAS Base Programming Certification instead of the January exam may do so. SAS sponsors the first SAS BASE certification for students enrolled in the course. The following attempt will be charged at a reduced price (based on discounts available at the time).
Teaching methods	In addition to the lectures and computer room exercises, much of the training is done autonomously using the syllabus, SAS documentation, and e-learning tools provided by SAS. The lectures will be given in co-modal (simultaneous transmission of the course given in auditorium on Teams) and the practical work will be given in face-to-face only.
Content	SAS Programming 1: Essentials • Use SAS Studio and SAS Enterprise Guide to write and submit SAS programs. • Access SAS, Microsoft Excel, and text data. • Explore and validate data. • Prepare data by subsetting rows and computing new columns. • Analyze and report on data. • Export data and results to Excel, PDF, and other formats. • Use SQL in SAS to query and join tables. SAS Programming 2: Data Manipulation Techniques • understand and control DATA step processing • create an accumulating column and process data in groups • manipulate data with functions • convert column type • create custom formats • concatenate and merge tables • process repetitive code • restructure tables.
Inline resources	https://moodleucl.uclouvain.be/course/view.php?id=8018 This course is open to all students from Belgian universities after enrolment in the academic programme (Master's or Doctoral students). However, as the number of places is limited, enrolment for students other than those in the Master's degree in statistics, general orientation or biostatistics ou a Master's degree in data sciences can only be made with the agreement of the course holder. This course is also available to students of the UCLouvain University Certificate in Statistics under certain conditions. The course content is only available after official registration.
Bibliography	Syllabus du cours en vente au début du cours. Accès à la documentation SAS.

Other infos	A large part of the training is carried out autonomously using materials available on the SAS website (SCYP program). This course is only open to students enrolled and with a good command of passive English.
Faculty or entity in charge	LSBA

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Data Science : Statistic	DATS2M	4		🔍
Master [120] in Biochemistry and Molecular and Cell Biology	BBMC2M	5		🔍
Master [120] in Biomedical Engineering	GBIO2M	5		🔍
Master [120] in Statistics: Biostatistics	BSTA2M	4		🔍
Additional module in computer science	APPSINF	4		🔍
Advanced Master in Quantitative Methods in the Social Sciences	LMQS2MC	5		🔍
Master [120] in Actuarial Science	ACTU2M	4		🔍
Master [120] in Population and Development Studies	SPED2M	5		🔍
Master [120] in Statistics: General	STAT2M	4		🔍
Approfondissement en statistique et sciences des données	APPSTAT	4		🔍
Master [120] in Mathematical Engineering	MAP2M	4		🔍
Certificat d'université : Statistique et science des données (15/30 crédits)	STAT2FC	4		🔍