

Campus Luzern – A Cooperative Project of the University-Level Institutions in Lucerne

«*Building packages in R and version control using GitHub*»

Tutor	Nicolas Attalides
Organization	Campus Luzern
Language	English
ECTS-Points	1
Nos. of participants	max. 10
Content	<p>To make your R code as useful and re-usable as possible it needs to be organised and structured in a way that follows good programming practices. The aim of an R package is to do exactly that!</p> <p>If you are developing your R package it is recommended that you version control your work rather than keeping multiple copies on your machine. GitHub offers a version control solution as well as a platform to share your work with the rest of the R community and allow others to collaborate with you.</p> <p>This course teaches the participants how to create an R package step-by-step and the basics of version control using GitHub and Git commands. The course is structured in the following main parts:</p> <ul style="list-style-type: none"> • Get started with R packages • Construct the package structure • Code / Documentation / Tests • Check & Build • Get started with GitHub • Link R package with Git repository • Learn the basics of version control

	<ul style="list-style-type: none"> • Share your R package on GitHub
Prerequisites/ Materials	<p>Course participants are expected to have some basic knowledge of the R programming language. Prior experience in basic data analysis (such as data manipulation and visualisation) or writing functions would help learning experience but is not required.</p> <p>Note: <i>If you do not have a GitHub account you will create one during the course.</i></p> <p>Participants should have their own laptop with R, RStudio and the relevant packages installed. Instructions for the technical setup will be circulated by the instructor before the course. In case of technical issues, a backup RStudio server (accessed via web browser) will be available during the course, however using your own laptop is recommended as it allows you to apply and practise what you learn on your own setup.</p> <p>Learning material such as slides, documentation, code, exercises, cheat-sheets, and data will be circulated by the instructor. Participants can contact the instructor to communicate any special needs and/or requests: nicolas.attalides@gmail.com</p>
Teaching method	<p>This course includes a range of activities such as package building demos, live-coding sessions, interactive quizzes, and practical exercises to work individually or in a group. Active participation and contribution are recommended.</p>
Charge	<p>This Campus Luzern offering is directed at researchers, post-docs, doctoral students, people interested in starting a dissertation and employees of Lucerne universities and is free of charge for these persons.</p> <p>Certificates with the respective ECTS-Points are prepared on request (graduate.resources@campus-luzern.ch).</p>