

## Introduction to Building Packages in R and Version Control

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<b>Language</b>	English
<b>ECTS-Points</b>	
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<b>Dates and time</b>	Online Saturday 1 <sup>st</sup> June 2024 09:30 – 16:30

<p><b>Content</b></p>	<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.</p> <p>The course is structured to cover the following topics:</p> <ul style="list-style-type: none"> <li>• Get started with R packages</li> <li>• Construct the package structure</li> <li>• Code / Documentation / Tests</li> <li>• Check &amp; Build</li> <li>• Get started with GitHub</li> <li>• Link R package with Git repository</li> <li>• Learn the basics of version control</li> <li>• Share your R package on GitHub</li> </ul>
<p><b>Prerequisites/ Materials</b></p>	<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 the learning experience but is not required.</p> <p><i>Note: If you do not have a GitHub account you will have the opportunity to 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. Learning material such as slides, code and solutions to exercises will be circulated by the instructor after the course.</p>
<p><b>Teaching method</b></p>	<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>