

Course name: R Workshop

Course code: E30148-B-0

Date: 19.04.2021 for BSc, 09.02.2021 for BSc, 14.09.2020 for MPhil

Time: 10:45–14:30 for BSc, 10:45–15:30 for BSc, 12:45–17:30 for MPhil

Location: Go to <https://tilburguniversity.zoom.us>. Select “Join”. Meeting ID is 646 412 9987. Password is 815283.

Instructor: Tunga Kantarci

Contact: kantarci@tilburguniversity.edu

Target group: Anyone with no knowledge of R, or those who want to refresh their knowledge of R.

Attendance policy: Participation is voluntary and does not award ECTS credits.

Participation: Due to COVID-19, the workshop will not physically take place in a lab but online on Zoom. This means that your home computer replaces the lab computer, and the instructor is present on Zoom instead of physically in a lab. This also means that you need R installed on your computer. R is free and can be downloaded from here <https://rstudio.com/products/rstudio/>. Make sure that R is running on your computer before the workshop takes place. The workshop is organized as follows. You will be provided with a “script file” that contains R syntax that will be executed during the workshop, data files, and a PDF file walking you through every step of the workshop. The instructor will address questions on Zoom. The instructor may not be able to address questions if technical anomalies arise during the online session. Therefore, you are offered to make an appointment to meet the instructor on Zoom or in person after the workshop on the same or another day to ask questions. Use the e-mail address indicated on this page to make an appointment.

Content: The workshop will introduce R. Participants will learn about interacting with R, the program syntax, working with matrices, importing raw data files, browsing the data, producing descriptive statistics, creating and manipulating variables, creating graphs, working with built-in R functions and building custom functions, carrying out regression analysis using matrix algebra and using an optimization algorithm, writing loops, optimizing a utility function subject to a budget constraint, code debugging, and using the help system of R. A limited number of the mentioned topics are slightly tailored towards the practitioners of econometrics instead of the practitioners of operations research.

Material: Participants will be provided with R program files, data files, and a printout explaining in detail the steps taken during the workshop. Download the workshop material from the “Files” folder on the Canvas page of the workshop before the workshop takes place. The instructor may also use Zoom to make the files available to participants at the start of the workshop. However, the instructor will assume that the former is the case.