Self-paced Online Course Getting started with R

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This self-paced course is your introduction to R, the powerful versatile open-source software. It equips you with essential knowledge and skills to start with R. Through practical examples and exercises. You'll gain confidence in using R and its development environment, RStudio. Whether you're a beginner or have some prior experience, this course provides a solid foundation in R programming. Embark on this learning journey at your own pace with our introduction course on getting started with R

Organised by	Wageningen Academy
Date	You can start any time – self-paced
Duration	20 hours in total
Price	€ 410

Why follow this programme?

We have seen that R is being increasingly mentioned in job advertisements in the plant breeding sector. At the very least, some proficiency in R is a valuable addition to your CV. Furthermore, because of the large community of other R users, you will also find that there is help and support online with any issues or difficulties you encounter (in fact, your question will probably already have been asked and answered on some online forum like StackExchange). Learning (and using) R is also great fun!

Is this programme for you?

For anybody that regularly works with data, R is an indispensable tool to become familiar with. In the long run, using R for data analysis will save you time and allow more advanced or appropriate analyses of your data.

For those without any previous programming experience, using R can seem daunting at the start, mainly when other software like Excel can also perform the task. The principal aim of this introductory course is to de-mystify the use of R software and help you gain confidence in using R. Students of this course are strongly encouraged to apply what they learn immediately, for example, by making their following bar chart or scatter plot in R (rather than in Excel).

Programme and topics

This course offers an online self-study programme that allows you to access the materials at your preferred pace and location conveniently. It encompasses various components, such as self-studying a tutorial, engaging in discussions through a dedicated platform, and completing a single assignment. Throughout the course, an online course moderator diligently monitors the weekly progress on the assignment and facilitates discussions on the platform.

After successful completion of this programme you will be able to:
- be able to work with common R data structures like vectors, matrices, data frames and lists
- write basic R code, including the use of loops, if statements and the apply family
- develop and debug functions in R
- generate high-quality visualisations and export these in various formats like PNG or PDF
- perform fundamental statistical analyses in R, including t-tests, X^2 tests and calculation of correlation coefficients
- be able to perform string manipulations, including the use of the regular expression for the pattern matching
- create a Rmarkdown document to combine code and text in a single HTML or Word file.

Practical information

Literature
There is a wealth of literature online regarding R introductions. The classic R manual 'An introduction to R' is an excellent place to start [R-intro.pdf (r-project.org)]

Time investment
This course requires approximately 20 hours for the average participant.

Prerequisite knowledge
As this is an introductory course there is no assumed prior knowledge. Access to a computer with Internet is, of course, necessary.

Coordinated by

Peter Bourke – Online course moderator
Jan-Kees Goud – Course adviser
Monique Tulp – Programme manager

More information & registration

Registration for this course is only open if you register for one of the online master's course series Plant Breeding in this list (you can find them here):

- Course series Plant Breeding Experimental Design, Data & Statistics: Experimental Design and Quantitative Analysis of Breeding Trials
- Course series Plant Breeding for Resistance: Plant Pathology & Disease Epidemiology
- Single course Plant Pathology & Disease Epidemiology
- Single course Advanced Statistics
- Single course Experimental Design and Data Analysis of Plant Breeding Trials

To register for *Getting Started with R*, you need to mention this text in the Remarks field of the registration form:

MY REGISTRATION INCLUDES THE COURSE GETTING STARTED WITH R

The price of **Euro 410,-** will be added and included in the total course fee. After payment of the total course fee, you get information to start with this course.

Questions? Contact Wageningen Academy.