

Statistics Workshops

Summer 2025

The **Center for Statistical Computing** (CSC) cordially invites all graduate students, staff, and faculty to attend its upcoming statistics workshops. These hybrid sessions are held both on **Zoom** and in the **Green Labs** on the upper level (UL) of Healey Library. During Summer 2025, the workshops series will cover a range of topics, including SPSS, Stata, R, Excel, and Statistics Learning. Detailed descriptions of each workshop, along with schedules and Zoom links are provided below.

Statistics Workshop Descriptions:

SPSS is a hands-on workshop designed to empower attendees with the skills to conduct meaningful data analysis using SPSS for Windows. Topics covered include entering and reading data, documenting variable and value labels, examining frequency and crosstab tables for individual and group data, recoding variables, performing independent sample *t*-tests, and conducting simple linear regression.

Introduction to R emphasizes conducting fundamental statistical analyses, including descriptive statistics, frequency distributions, Chi-square tests, independent sample *t*-tests, one-way ANOVA, and linear and logistic regressions. Additional topics cover downloading and installing R packages, reading, and writing data files, and creating R graphs. Notably, R is a free, open-source software supported by a strong user community.

Statistical Analysis Using Excel provides valuable tips for enhancing efficiency in data analysis with Excel. Topics covered include entering data, organizing data and performing descriptive statistics, examining frequencies and crosstab tables, conducting independent and paired sample *t*-tests, correlation analysis, and linear regression.

Stata serves as an introduction to Stata, encompassing both the graphic user interface and intuitive command syntax approaches. It aims to efficiently teach fundamental Stata operations. Topics covered include browsing data, data management, descriptive statistics, independent samples *t*-test, and simple linear regression models.

Logistic Regression and Random Forest in R: A Practical Introduction: This workshop is designed to introduce the fundamental principles of classification techniques in data science, with a particular emphasis on Logistic Regression and Random Forest using R programming language. Participants will develop a conceptual understanding of both models, gain hands on experience implementing them in R, and examine their respective strengths and limitations through real-world examples. The session aims to equip students with the analytical skills needed to critically evaluate and apply classification methods in research and data analysis across a range of academic disciplines.

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Summer 2025 Statistical Workshop Schedule:

<i>Topic</i>	<i>Date</i>	<i>Day</i>	<i>Time</i>	<i>Registration</i>
SPSS	Jun. 12	Thursday	12:00-2:00 P.M.	In-Person Register --- Virtual Register
Intro. To R*	Jun. 26	Thursday	1:30-3:30 P.M.	In-Person Register --- Virtual Register
Statistical Analysis Using Excel	Jul. 08	Tuesday	12:00-2:00 P.M.	In-Person Register --- Virtual Register
Stata	Jul. 15	Tuesday	12:00-2:00 P.M.	In-Person Register --- Virtual Register
Logistic Regression and Random Forest in R	Aug. 07	Thursday	12:00-2:00 P.M.	In-Person Register --- Virtual Register

* Intro. To R will be held in the Lab C, Upper Level of Healey Library.

Registration Procedures:

Seats and handouts are limited. Please register in advance.

1. Click the 'In-person Register' or 'Virtual Register' under Registration.
2. Fill up all the information request and submit your registration.
3. Join the workshops via Zoom link in the confirmation email or attend in-person session for hybrid workshops.

All Hybrid workshops will be held in the Green Lab on the upper level (UL) of Healey Library.

Please contact Center for Statistical Computing at csc@live.umb.edu for any questions regarding the workshops.

Web: https://www.umb.edu/academics/graduate/info_for_graduate_students/center_for_statistical_computing

Location: **Healey Library, Green Lab.** (From the main elevators in Healey Library, take the Upper level (UL). Turn right out of elevator, and you'll find Green Lab on the left in the hallway)