

# Economic Data Analysis

## Entrance requirements



We suppose that applicants for the program Economic Data Analysis (EDA) are familiar with the following topics (at the bachelor level):

- Basic concepts of matrix algebra (vectors, matrices, matrix operations)
- Basic concepts of integral calculus and derivatives
- Basic concepts of probability theory, random variables, sampling distributions and inferential statistics
- Basic knowledge of MS Excel
- Basic knowledge of freeware R (data management, packages, matrix algebra, data visualization, descriptive statistics)
- Regression analysis with cross-sectional and time series data

Students, who will be admitted to the program, will receive more detailed information, with links on self-study materials.

### Literature:

- ANDERSON, D R., SWEENEY, D.J., WILLIAMS, T.A., CAMM, J.D, KIPP, R.M.. *An Introduction to Management Science : Quantitative Approaches to Decision Making. Mason: South Western (Chapters 2-7), 2010.*
- BIRGER, Stjernholm Madsen. *Statistics for Non-Statisticians. 2nd ed. Springer, 2016, ISBN: 978-3-662-49348-9.*
- CHIANG, Alpha C., WAINWRIGHTT, Kevin. *Fundamental methods of mathematical economics. 4th ed. Boston: McGraw-Hill, 2005. xix, 688 s. ISBN 0-07-123823-9; Chapter 4 and 5 - "Linear Models and Matrix Algebra".*
- HÄRDLE, Wolfgang Karl, KLINKE, Sigbert, RÖNZ, Bernd. *Introduction to Statistics. Springer, 2015, ISBN: 978-3-319-17703-8.*
- WEISS, N. A.. *Elementary statistics. 8th ed. Boston: Addison-Wesley, 2012. xxiv, 588 s. ISBN 978-0-321-70998-1; Chapters 1 -6*
- WOOLDRIDGE, R.M. *Introductory Econometrics: A Modern Approach. Mason: South Western. (Chapters 1-15, 17)*