



FREIE UNIVERSITÄT BOZEN  
LIBERA UNIVERSITÀ DI BOLZANO  
FREE UNIVERSITY OF BOZEN - BOLZANO

Fakultät für  
Wirtschaftswissenschaften

Facoltà di  
Economia

School of  
Economics and Management

## ADVANCED COMPUTER SKILLS

**TEACHING LANGUAGE:** English

**SEMESTER:** First

**TOTAL LECTURE HOURS:** 30 for each group

**TOTAL HOURS OF EXERCISES:** 24 for each group

**CREDIT POINTS:** 5

**SCIENTIFIC FIELD:** ING-INF/05 Sistemi della elaborazione delle informazioni

**LECTURER:** Paolo Coletti, office E510, [www.paolocoletti.it/advancedcomputer](http://www.paolocoletti.it/advancedcomputer)

**TEACHING ASSISTANT:** Damiano Somenzi, office E523, Damiano.Somenzi AT unibz.it

**PREREQUISITE:** English, Computer Science and Information Processing, Statistics A

**COURSE DESCRIPTION:** this course presents (1) data entry and handling, descriptive statistics, statistical tests and regression models using Predictive Analytics Software PASW-SPSS; (2) relational databases building and managing using Microsoft Access; (3) basic programming concepts using Visual Basic for Application macros.

**LIST OF TOPICS COVERED:** relational databases, Microsoft Access, PASW-SPSS, Visual Basic for Applications

**EDUCATIONAL OBJECTIVES:** to give the students knowledge and experience with different computer tools they may find useful in their future work or study career. Students get in touch with the most used statistical package and its powerful statistical tests, learn to organize data in a relational database and to extract and modify them, practice with simple concepts of programming functions which are the basis for learning any other programming language.

**TEACHING FORMAT:** the lecturer shows theory, examples and exercises on a computer and students follow and repeat on their computers. Homework will be assigned and then discussed in class. Slides will be provided for each lesson. Lecturer is in charge of PASW-SPSS theory and exercises, databases theory and Access exercises. Teaching assistant is in charge of homeworks and of the Visual Basic for Applications programming section, since it consists only on exercises.

**ASSESSMENT:** practical test with a computer, coursework on Access and databases' architecture (30% of the grade).

### REQUIRED READINGS:

- Discovering Statistics Using SPSS, Andy Field, ISBN 0-7619-4452-4
- Writing Excel Macros with VBA, Steven Roman, ISBN 0-596-00359-5
- Databases course book, available on [www.paolocoletti.it/advancedcomputer](http://www.paolocoletti.it/advancedcomputer)

### SUPPLEMENTARY READINGS:

- SPSS Survival Manual, Julie Pallant, ISBN 0-335-21640-4
- Excel 2007 VBA Macro Programming, John Walkenbach and Jan Karel Pieterse, ISBN 978-0-470-04674-6
- Sams Teach Yourself Microsoft Office Access 2003 in 24 Hours, Alison Balter, ISBN 0-6723-2545-4