

## SUPERVISED LEARNING

### COURSE CONTENT

Course participants will be able to:

- Assess and validate a statistical (supervised) model
- Select an appropriate model for a supervised learning situation and relevant exploratory variables
- Conduct statistical (supervised learning) algorithms and to implement it in the statistical software R
- Interpret results of statistical models

The course will cover the following topics:

- Regularization methods for linear regression
- Model assessment and selection
- Neural networks
- Decision trees
- Random forests
- Bagging and boosting

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### SCHEDULE\*

- Thursday 09:00 - 17:00, Friday 08:00 - 16:30, Saturday 09:00 - 14:30

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### PRE-REQUISITE

The participants must have basis knowledge in:

- mathematical principles including basic knowledge of probability theory
- statistical programming soft-ware R
- understanding of regression modelling techniques

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### REGISTRATION

- Deadline for registration is 3 weeks before.
- The fee for the course is € 645; discounted rate for affiliated with a university € 600.
- The courses may take place in parts or as a whole online (virtual conferences) if in-classroom teaching is not possible.

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\*subject to change