

Statistics

ECTS : 5

Description du contenu de l'enseignement :

Chapter 1 : We mostly review the concepts covered in the stat I course (UE 07).

Chapter 2 : Sampling. Chapter 3 : Estimation

- Sampling, sample mean, sample variance.
- Convergence in probability and in distribution
- Law of large numbers
- Central limit theorem
- Parametric estimation
- Bias, variance and mean squared error
- Moment method estimation
- Maximum likelihood estimation
- Confidence intervals

Compétence à acquérir :

Understanding the usefulness and limitations of modeling by random models, in particular sampling models in the context of parametric statistics.