

## MASTER Economics Refresher course in mathematics and statistics

Contact	Description	Information
Laurent BRUASSE laurent.bruasse@univ-amu.fr	Course. Code: PA-ME5BEC-BECAU7 Domain: Law, Economics, Management	<a href="http://formations.univ-amu.fr">http://formations.univ-amu.fr</a> Department: Faculty of Economics and Management <i>Last modification: 21/06/2018</i>

### CONTENT

For students who want to improve their math level : reminder about prerequisites for the Mathematics classes and basic notions of probability and statistics.

Course outline :

1. Linear algebra
2. Analysis and optimization
3. Matrix diagonalization
4. Ordinary differential equations of order 1
5. Basic notions of probability and statistics

### PROFESSIONAL SKILLS

- Understand the prerequisites for the other lectures

### BIBLIOGRAPHY

- Mathématiques pour économistes, Analyse et algèbre, Hayek et Leca, ed Dunod

- Mathematics for economists, C.P. Simon, L. Blume, W.W. Norton & Company
- **Statistics for Business & Economics, Revised, D. Anderson, D. Sweeney, South-Western College Pub.**

### ORGANISATION

Course 6h

### VOLUME OF TEACHINGS

- Lectures: 6 hours

### TRAININGS

**Master's degree: Economics**

- Empirical and theoretical economics
- Economic policy analysis
- Econometrics, big data, statistics
- Quantitative finance and insurance

