

Environmental and Food Economics - How to address any gap in the personnel preparation

Students admitted to the Master program even without completely comply with the admission prerequisites have to attend on-line crash courses in order to fill the gaps in their personnel preparation.

Crash courses will start August 31st and will end September 25th. All lectures will be provided online using Zoom or MS Teams (the links will be provided asap) and they will also be recorded and they will be available to students at the link <https://cdlefe.ariel.ctu.unimi.it/v5/home/Default.aspx>

The list of crash courses that will be provided is reported in the following, together with crash courses syllabi and suggested references. Students are recommended to start filling the gaps in their preparation before the beginning of the crash courses and they are invited to read the suggested references.

MATHEMATICS (32 hours)

Syllabus

Introductory topics: algebra, equations, miscellaneous.

Functions of one variable and their properties.

Continuity and differentiability.

Single-variable optimization.

Integration.

Matrix and vector algebra. Determinants and inverse matrices.

Linear Transformation. Eigenvectors and eigenvalues

References

Stewart J. (2010): Calculus. Cengage Learning, Inc; 7th Revised ed. Edition.

Strang G. (2009): Introduction to Linear Algebra. 4th ed. Wellesley-Cambridge Press.

MICROECONOMICS (30 hours)

Syllabus

The market.

The budget constraint.

Preferences.

Utility.

Choice.

Demand.

Slutsky's equation.

Market demand.

Equilibrium.

Technology.

Profit maximization.

Minimization of costs.

Cost curves.

Firm supply.

Industry supply.

Monopoly. Monopoly behavior.

References

H. R. Varian, Intermediate Microeconomics: A Modern Approach, W.W. Norton Pub. (any edition). Chapters: 1-6, 8, 15-16, 19-26.