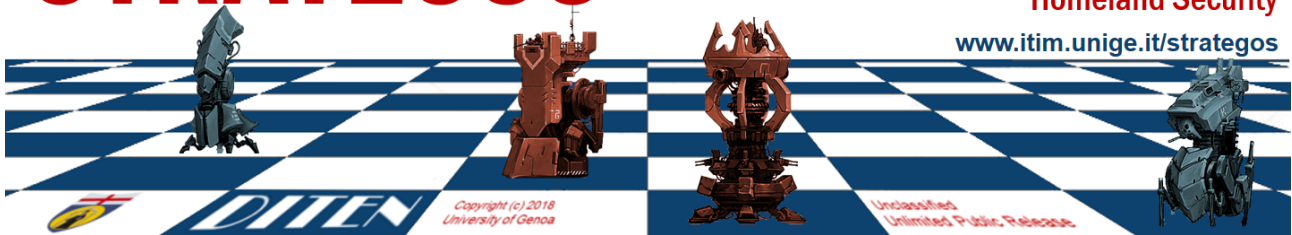


# STRATEGOS

Engineering Technologies for Strategy in  
Defense, Industry, Government &  
Homeland Security

[www.itim.unige.it/strategos](http://www.itim.unige.it/strategos)



## STRATEGOS

*Master of Science on Engineering Technologies for Strategy and Security,  
Modelling, Simulation, Data Analysis, AI/IA for Strategies on Operations and Systems*

**Course: Economics**

*SSD SECS-P/01*

**Credits: 4**

### **Schedule & Timetable:**

*1<sup>st</sup> Year, 2<sup>nd</sup> Semester*

*Timetable to be Finalized*

### **Teachers, Email, URL:**

**Gabriele Cardullo**, [cardullo@economia.unige.it](mailto:cardullo@economia.unige.it), [sites.google.com/site/cardullogabriele](https://sites.google.com/site/cardullogabriele)

**Maurizio Conti**, [mconti@economia.unige.it](mailto:mconti@economia.unige.it), [sites.google.com/site/mauriziocontiunige](https://sites.google.com/site/mauriziocontiunige)

Offices in DIEC (Department of Economics) Via Vivaldi 5, 16126 Genova, Italy

### **Assistants for Exercises & Simulation Lab Experience:**

*Exercises will be carried out by Teachers, Invited Guests and Assistants will be introduced directly to class for specific Seminars.*

### **Education Objectives:**

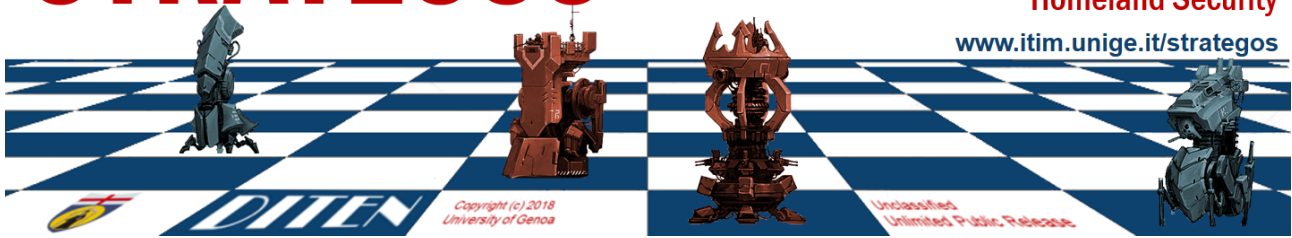
*Provide Fundamental concepts of Economics, Monopoly & Oligopoly Models, Basic Consumer Theory as well as Game Theory applied to these fields*

*Acquire skills on use of Techniques, Methodologies and Tools able to deal with real world problems in Economics with specific attention to Pricing and Business Development in Monopolies and Oligopolies, Determinants of Market Structure, Cartels & Collusion, Patents, Predatory Pricing, etc.*

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## Course Program & Elements:

- First Module addresses the basic concepts of non-cooperative Game Theory:
  - Elementary Taxonomy Concerning Games
  - Dominant and Dominated Strategies, Nash Equilibrium
  - Limits and Refinements of Nash Equilibria
  - Repeated Games
  - Games and Rationality
- Second Module addresses following topics, continuing to build on the Game Theory Techniques and Tools developed in the first module:
  - Basic Consumer Theory;
  - Monopoly Pricing;
  - Oligopoly Theory;
  - Determinants of Market Structure;
  - Cartels & Collusion;
  - Patents;
  - Predatory Pricing.

## Teaching Approach:

*All the topics and issues will be studied by making real-world examples and combining theory with exercises and applications. The Classes are based on lectures and exercises.*

## Evaluation and Final Exam:

*Evaluation of Skills based on Final Exam*

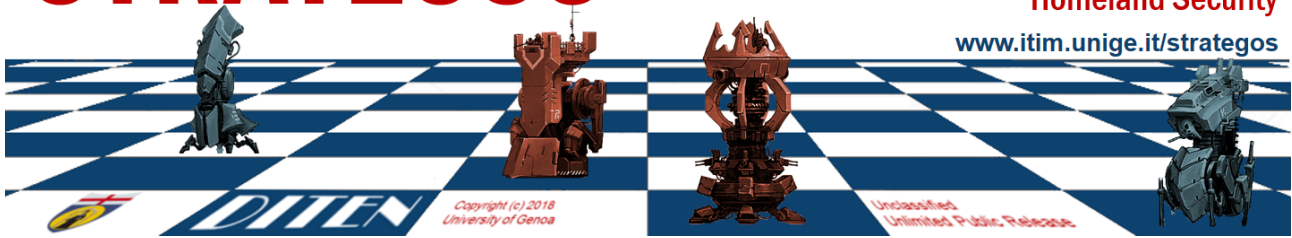
## Time Zone:

Italy (CET), GMT+1

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## Prerequisites:

*The Course provide foundations and references, so no specific prerequisites are applicable. Basics Concepts on Economics and Game Theory could be useful.*

## References

- *Recommended readings for this First Module are:*
  - *Dixit, A. and B. Nalebuff (2010): The Art of Strategy. W.W. Norton & Co Inc, M*
  - *Osborne, M. and A. Rubinstein (1994): A Course on Game Theory, The MIT Press*
- *There is not a single book suggested for the while module. However, most of the material is based on:*
  - *Pepall, Richards, Norman, (2013) Industrial Organization: Contemporary Theory and Empirical Applications. fifth edition, Blackwell Publishing*
  - *Belleflamme P. and Peitz M. (2015), Industrial Organization. Markets and Strategies, Cambridge University Press.*