



# UNIVERSITÀ DI PISA

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## STRATEGIC AND COMPETITIVE INTELLIGENCE

FILIPPO CHIARELLO

Academic year 2021/22  
Course DATA SCIENCE AND BUSINESS INFORMATICS  
Code 787II  
Credits 6

Modules	Area	Type	Hours	Teacher(s)
STRATEGIC AND COMPETITIVE INTELLIGENCE	ING-IND/35	LEZIONI	48	FILIPPO CHIARELLO ANTONELLA MARTINI

### Programma (contenuti dell'insegnamento)

- [1] SCI FUNDAMENTALS: VUCA, Ansoff Model, surprise in business, risk & uncertainty, applications of CI, CI cycle
- [2] IP INTELLIGENCE BASICS: Patents, trademarks, copyrights, patent search engines, ecosystems & platforms
- [3] DATA SCIENCE FOR SCI PROJECTS: (1) Basics: text analysis; (2) Advanced: NIR, topic modelling, network analysis and visualization
- [4] DATA SCIENCE PROJECT DESIGN: Scoping, KITs and KIQs, metrics, management, result, visualization
- [5] SCI APPLICATION LAB: How to extract intelligence from scientific papers; How to extract intelligence from IP; How to extract intelligence from HR and other sources (i.e. Wikipedia)

### Bibliografia e materiale didattico

#### REFERENCE BOOKS:

- For [I, II, IV] modules: McGonagle, John J., Vella, Carolyn M. (2012). *Proactice Intelligence. The Successful Executive's Guide to Intelligence*, Springer
- For [III, V] modules: Ziegler, Cai-Nicolas (2012). *Mining for Strategic Competitive Intelligence*, Springer + [Text Mining with R](#)

For each lessson, a detailed bibliography is available on the Course Plan (in SCI Teams)

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