



## Two year Master in FINANCE AND INSURANCE

The two years Master degree in Finance and Insurance aims to develop skills required for the management of complex financial products and to practice the profession of actuary. The courses are taught in the English language.

Students will attend classes aimed at providing:

- The analytical and quantitative tools for understanding the dynamics of financial markets and for dealing with financial transactions characterized by investment risk;
- The necessary skills to design and manage complex insurance products, both in the public and the private sector;
- The expertise to analyze financial and insurance markets as well as the legal knowledge for regulatory and market control purposes.

To achieve the above objectives, the degree provides: advanced courses in mathematical finance, financial econometrics, life insurance mathematics, economics of financial markets and insurance law, in the first year; social securities, non-life insurance mathematics and business administration, in the second year. In addition, students may choose other activities, laboratories in financial and actuarial sciences and training in public and private institutions, professional firms, in Italy and abroad.

Graduates in Finance and Insurance have extensive knowledge useful to design and management of complex financial and insurance products as well as to understand the organization and the operating rules of financial and insurance markets. They have specific knowledge relating to the definition and management of public and private social security systems, to the measurement of risks related to financial and insurance products and, more generally, to the management activity carried out by financial and insurance intermediaries. Hence, graduates in Finance and Insurance have expertise to hold high-level positions within financial and insurance private institutions, market control authorities, social security institutions, or as a consultant for the evaluation and management of complex products, of the related risks, and for assessing the overall management activities of financial and insurance intermediaries.

To attend with profit the master degree course in Finance and Insurance students should have an adequate knowledge of mathematics, economics and statistics acquired with the three-year degree in the class L-18, L-33 and L 41 of the Italian academic system, or equivalent qualification obtained abroad, in areas such as economics, finance, business administration, statistics, or mathematics. For graduates of other classes, it is required to hold at least 45 credits earned in sectors from MAT/01 to MAT /09 (mathematics), SECS/S-01 (statistics), SECS/S-06 (financial and actuarial mathematics), ING-INF/05, INF/01, and ING-IND/35 (financial engineering and computer science). A further requirement is a good knowledge of English, both spoken and written. For all the candidates, in addition to the above requirements, admission to the course is subject to the assessment of individual preparation by a committee. The admission test to verify the preparation is of a selective nature and focuses on subjects such as mathematics, financial

mathematics, statistics, economics, business administration and English. A special session for the assessment of the personal preparation will be dedicated to international students.

#### First year

| Course name                                  | Field of study             | CFU |
|--|----------------------------|-----|
| Quantitative models in finance               | Mathematics and statistics | 9   |
| Financial econometrics                       | Mathematics and statistics | 9   |
| Pension funds and life insurance mathematics | Mathematics and statistics | 9   |
| Economics of financial markets               | Economics                  | 12  |
| Management of financial institutions         | Business administration    | 12  |
| Insurance law                                | Law                        | 6   |

#### Second year

| Course name                      | Field of study             | CFU |
|----------------------------------|----------------------------|-----|
| Social Securities                | Mathematics and statistics | 6   |
| Advanced business administration | Business administration    | 12  |
| Non life insurance mathematics   | Mathematics and statistics | 9   |
| Computer lab for finance         | Mathematics and statistics | 6   |
| Free courses                     |                            | 12  |
| Final exam (thesis)              |                            | 18  |