Master Degree in Quantitative Finance and Insurance

SUGGESTED PROFILES FOR COHORT 2020/21

LEGENDA

In blue: Choice among alternatives, depending upon the main curricula (Finance or Insurance and Statistics)

In red: Elective

Suggested electives can be grouped in the following main topics:
Insurance
- Economics of savings and pensions (6 CFU)
- Bilancio delle banche e delle assicurazioni (10 CFU)

Statistics
- Statistical Machine Learning (6 CFU)
- Multivariate statistical analysis (6 CFU)
- Database and algorithms (12 CFU)

Trading
- Strategie e tecniche negoziazioni di borsa (8 CFU)
- Risk Management
- Quantitative risk management (6 CFU)

Phd
- Decisions and uncertainty (6 CFU)
- Advanced asset pricing (6 CFU)

Finance students may consider as elective also Mathematics for insurance.
Insurance students may consider as elective also Econometrics and Corporate finance.
Find below examples of personalized study plans.

PROFILE 1: PURE INSURANCE

Curriculum in Insurance and Statistics

119-124 CFU

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Bilancio delle banche e delle assicurazioni (in Italian, elective, 10 CFU)

Second year, second semester

Commercial law

Economics of savings and pensions (6 CFU)

Quantitative risk management (elective, 6 CFU)

PROFILE 1bis: PURE INSURANCE

Curriculum in Insurance and Statistics

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Statistical Machine Learning (elective, 6 CFU)

Second year, second semester

Commercial law

Economics of savings and pensions (6 CFU)

Quantitative risk management (elective, 6 CFU)

PROFILE 2: MAINLY INSURANCE + SOME FINANCE

Curriculum in Insurance and Statistics

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Second year, second semester

Commercial law

Economics of savings and pensions (6 CFU)

Econometrics (elective, 12 CFU)

PROFILE 2bis: MAINLY INSURANCE + SOME FINANCE

Curriculum in Insurance and Statistics

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Second year, second semester

Commercial law

Quantitative Risk Management (6 CFU)

Econometrics (elective, 12 CFU)

PROFILE 2ter: MAINLY INSURANCE + SOME FINANCE

Curriculum in Insurance and Statistics

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Decisions and uncertainty (6 CFU)

Second year, second semester

Commercial law

Economics of savings and pensions (elective, 6 CFU)

Quantitative risk management (elective, 6 CFU)

PROFILE 3: MAINLY FINANCE + SOME INSURANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Mathematics for insurance (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

Economics of savings and pensions (elective, 6 CFU)

PROFILE 3bis: MAINLY FINANCE + SOME INSURANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Mathematics for insurance (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

Multivariate statistical analysis   (elective, 6 CFU)

PROFILE 3ter: MAINLY FINANCE + SOME INSURANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Mathematics for insurance (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

Advanced asset pricing (elective, 6 CFU)

PROFILE 3quater: MAINLY FINANCE + SOME INSURANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

Mathematics for insurance (elective, 6 CFU)

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Statistical Machine Learning (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

PROFILE 4: PURE FINANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Strategie e tecniche di negoziazione di borsa (in Italian, elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

Advanced asset pricing (elective, 6 CFU)

PROFILE 4bis: PURE FINANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Strategie e tecniche di negoziazione di borsa (in Italian, elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

Multivariate statistical analysis   (elective, 6 CFU)

PROFILE 4ter: PURE FINANCE

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Economics of Savings and Pensions (elective, 6 CFU)

Second year, first semester

Derivatives

Fixed income

Second year, second semester

Commercial law

Quantitative risk management (6 CFU)

Advanced asset pricing (elective, 6 CFU)

PROFILE 5: FINANCE/STATISTICS

Curriculum in Finance

(126 CFU)

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Statistical machine learning (elective, 6 CFU)

Second year, second semester

Commercial law

Multivariate statistical analysis (6 CFU)

Database and algorithms (elective, 12 CFU)

PROFILE 5bis: FINANCE/STATISTICS

Curriculum in Finance

(120-126 CFU)

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Statistical machine learning (elective, 6 CFU)

Second year, second semester

Commercial law

Multivariate statistical analysis (6 CFU)

Quantitative risk management (elective, 6 CFU)

PROFILE 6: INSURANCE/STATISTICS

Curriculum in Insurance and Statistics

(126 CFU)

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Statistical machine learning (elective, 6 CFU)

Second year, second semester

Commercial law

Multivariate statistical analysis (6 CFU)

Database and algorithm (elective, 12 CFU)

PROFILE 6bis: INSURANCE/STATISTICS

Curriculum in Insurance and Statistics

(126 CFU)

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Mathematics for insurance

First year, second semester

Asset pricing and portfolio choice

Banking

Life and non-life insurance techniques

IT training

Second year, first semester

Derivatives

Fixed income

Statistical machine learning (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk Management (6 CFU)

Database and algorithm (elective, 12 CFU)

PROFILE 7: PURELY THEORETICAL

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Mathematics for insurance (elective, 6 CFU)

Second year, second semester

Commercial law

Economics of savings and pensions (6 CFU)

Advanced asset pricing (elective, 6 CFU)

PROFILE 7bis: PURELY THEORETICAL

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Mathematics for insurance (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative Risk Management (6 CFU)

Advanced asset pricing (elective, 6 CFU)

PROFILE 7ter: PURELY THEORETICAL

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Second year, second semester

Commercial law

Multivariate statistical analysis (6 CFU)

Quantitative Risk Management (elective 6 CFU)

Advanced asset pricing (elective, 6 CFU)

PROFILE 7quater: PURELY THEORETICAL

Curriculum in Finance

First year, first semester

Mathematics for finance

Numerical and statistical methods for finance

Corporate Finance

First year, second semester

Asset pricing and portfolio choice

Banking

Econometrics

IT training

Second year, first semester

Derivatives

Fixed income

Decisions and uncertainty (elective, 6 CFU)

Second year, second semester

Commercial law

Quantitative risk Management (6 CFU)

Advanced asset pricing (elective, 6 CFU)