

A new shape of Finance



GrEnFIn proposes a new role of finance as a facilitator of the transition process.

Finance is recognized to be pivotal for the sustainable transition.

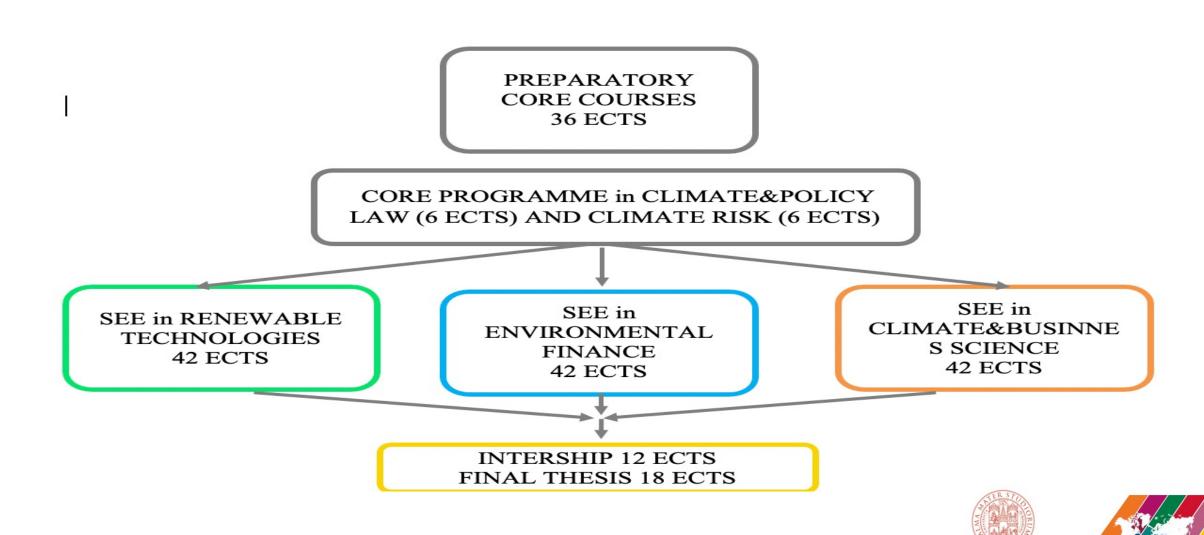
We ethically reshape its goal into a societal service for the common good.

The Master proposes an innovative and interdisciplinary educational path targeted to the

Sustainable Energy Expert, expected to be the Hero of the Green Economy.

- INTERDISCIPLINARY PATH: engineering knowledge, quantitative skills, economic-business competences
- INNOVATIONS: Innovations in methodologies and contents.
- SYNERGIES WITH THE BUSINESS WORLD: GrEnFIn Master is our answer to the stakeholders' needs. The structures
 comes from a co-designed project agreed with academy and business world.

Overview of the GrEnFIn Master Structure: an Interdisciplinary Path



First semester: Preparatory Core Courses (36 ECTS)

RISK MODELLING AND PROBABILITY (12 ECTS):

- Introduction to probability and the mathematics of risk (6 ECTS)
- Risk modelling and evaluation (6 ECTS)

CLIMATE-RELATED RISK AND COMMODITY MARKET (12 ECTS):

- Climate and transition risks: uncertainties, complexity, and implications for economic and financial dynamics (6 ECTS)
- Commodities and Energy Markets: interactions with climate policy (6 ECTS)

FINANCIAL MARKET & CLIMATE CHANGE: PRICING/HEDGING AND ASSET MANAGEMENT (12 ECTS):

- Mathematical Finance, Asset Pricing, Derivatives (6 ECTS)
- Asset Management and Transition Risk (6 ECTS)



Between the 2nd AND 3rd SEMESTER: Core courses (12 ECTS) 4th SEMESTER: Internship (12 ECTS) and Final Thesis (18 ECTS)

INTERNATIONAL LAW AND SUSTAINABILITY (6 ECTS)
CREDIT AND WEATHER DERIVATIVES (6 ECTS)

INTERNSHIP (12 ECTS)

FINAL THESIS (18 ECTS)



The Sustainable Energy Expert: Three Curricula

SEE in Renewable Technologies

Here we have focus on the sustainable engineering technologies. Students will increase their knowledge in Renewable Energy and Climate and also gain financial and economics tools that can help to have a 360 degrees vision about the energy market and the implication of the transition process in term of increased risk.

SEE in Environmental Finance

Students will increase their knowledge in risk and financial management associate to climate. The competences in financial engineering allow to design contingent claims ad hoc able to provide useful hedging strategies.

SEE in Climate&Businness Science

Students will gain a deep economic perspective of the energy transition process and will be able to identify the best way to manage it. The main subject will give the student deeper understanding of Climate science, prediction and mitigation strategies.



Different specializations

RENEWABLE **TECHNOLOGIES TRACK**

Related Courses (30 ECTS)

- Climate System and Climate Change (6 ECTS)
- Smart Grids for Smart Cities (6 ECTS)
- Solar&Wind Energy and Storage Systems (6 ECTS)
- Python coding and data science (6 ECTS)
- Machine Learning and Al (6 ECTS)
- Summer/Winter school (6) ECTS)
- Summer/Winter Training (3 ECTS)
- •Intensive Programme (6 ECTS)

Electives (12 ECTS)

- Hydraulic and Bioenergy (6 ECTS)
- Corporate Finance (6 ECTS)
- Financial Risk Management (6 ECTS)
- Statistical Methods for asset management (6 ECTS)
- Economics of financial market and sustainable perspectives (6 ECTS)
- Advanced Mathematical Finance (6 ECTS)
- Advanced methods for risk management (6 ECTS)
- Computational Finance (6 ECTS)

ENVIRONMENTAL FINANCE TRACK

Related Courses(30 ECTS)

- Climate System and Climate Change (6 ECTS)
- Smart Grids for Smart Cities (6 ECTS)
- Python coding and data science (6 ECTS)
- Advanced Mathematical Finance (6 ECTS)
- Summer/Winter school (6 ECTS)
- Summer/Winter Training (3 ECTS)
- •Intensive Programme (6 ECTS)

Electives (12 ECTS)

- Advanced methods for risk management (6 ECTS)
- Computational Finance (6 ECTS)
- Statistical Methods for asset management (6 ECTS)
- Economics of financial market and sustainable perspectives (6 ECTS)
- Econometrics of financial markets (6 ECTS)
- Machine Learning and Al (6 ECTS)

CLIMATE&BUSINNES TRACK

Related courses(30 ECTS)

- Climate System and Climate Change (6 ECTS)
- Economics of financial market and sustainable perspectives (6 ECTS)
- Smart Grids for Smart Cities (6 ECTS)
- Python coding and data science (6 ECTS)
- Summer/Winter school (6 ECTS)
- Summer/Winter Training (3 ECTS)
- Intensive Programme (6 ECTS)

Electives (12 ECTS)

- Corporate Finance (6 ECTS)
- Financial Risk Management (6 ECTS)
- Statistical Methods for asset management (6 ECTS)
- Statistics of financial markets (6 ECTS)
- Advanced methods for risk management (6 ECTS)







ENTRY BRICK

Risk modelling and probability – 12 ECTS
Climate-related risk and commodity Market – 12 ECTS
Financial Markets & Climate change: pricing/hedging and asset management – 12 ECTS

BASIC TECH BRICK Climate System and Climate Change – 6 ECTS
Smart Grids for Smart Cities – 6 ECTS
Phyton Coding and Data Science – 6 ECTS

INTERMEDIATE TECH BRICK Solar&Wind Energy and Storage Systems – 6 ECTS
Machine Learning and AI– 6 ECTS

ADVANCED TECH BRICK ELECTIVE FROM THE RENEWABLE TECHNOLOGIES TRACK— 6 ECTS ELECTIVE FROM THE RENEWABLE TECHNOLOGIES TRACK— 6 ECTS

INTERMEDIATE CLISCI BRICK

Economics of Financial Market and Sustainable Perspectives—6 ECTS ELECTIVE FROM THE CLIMATE SCIENCE TRACK—6 ECTS

ADVANCED CLISCI BRICK ELECTIVE FROM THE CLIMATE SCIENCE TRACK – 6 ECTS ELECTIVE FROM THE CLIMATE SCIENCE TRACK – 6 ECTS

INTERMEDIATE QUANT BRICK

Advanced Mathematical Finance – 6 ECTS
ELECTIVE FROM THE ENVIRONMENTAL FINANCE TRACK – 6 ECTS

ADVANCED

QUANT BRICK

ELECTIVE FROM THE ENVIRONMENTAL FINANCE TRACK—9 ECTS

CLIPOLICYBRICK

International Law and Sustainability-6 ECTS
Credit and Weather Derivatives-6 ECTS

RADUATION Internship – 12 ECTS
BRICK Final Thesis – 18 ECT

A brick composition of the educational path

The GrEnFIn educational Path can be tailored on the interests of students:

- ENTRY BRICK
- BASIC TECH BRICK
- INTERMEDIATE/ADVANCED BRICKS (CURRICULA)
- CLIPOLICY BRICK
- GRADUATION BRICK

A number of electives are offered inside every curriculum.

GrEnFIn offers a **flexible educational path** to be tailored by students



A strong connection with the industrial/business world



- The GrEnFIn master is our answer to the stakeholders needs: from the GrEnFIn project survey to a worldwide needs analysis and finally to the definition of the learning outcomes and the draft od the educational path
- L and SMEs are partners of GrEnFIn project: relevant and innovative contribution in term of contents (frontier topics) and methodologies (teamwork based on real cases) during the testing and piloting phases
- Summer/Winter School and Training based on case studies and team projects
- Intensive Programme with IT Lab focused on frontier topics
- 300 hours of curricular Internship to practically approach the real problems
- Double supervision of the final Thesis: an academic and an industrial supervisor



GrEnFIn Master: from an EU Project to an educational International Dimension



- GrEnFIn Consortium came up with the idea of the International Master as a result of a joint work of academies/enterprises: **international network**
- **Double/Multiple Degree**: LMU and other forcoming agreements to make the enrich the of abroad experiences
- Thesis abroad and Overseas opportunities are offered thanks to GrEnFIn connections
- Industrial research in international scenarios



Contribute to save the Planet



Study with us reshaping the Financial Science into a new Ethical Science

Expert, the Hero of the Green Economy



Admission Procedure

- Admission to the 2nd cycle degree programme is also subject to the possession of a 1st cycle degree (in one of the classes coherent with LM16, see the list available online)
- Certificate of English knowledge: at least B2
- Assesment of of knowledge and skills in peculiar fields. Therefore students are requested to take the GrEnFIn Assessment Test available online at @dedicatedwebpage.

Admission to the Second Cycle Degree Programme is in any case for all candidates subject to the possession of the minimal curricular requirements (checked by the assessment test) and to the assessment of personal competencies and skills by the Admission Board appointed by GrEnFIn Joint Master Board. Personal competencies and skills will be assessed through the evaluation of the curriculum and any other information coming from the required documents to be upload in the application procedure.

FIRST INTAKE: APRIL 2022



