SCIENCES, TECHNOLOGIES AND HEALTH

Biorefinery and biomaterials

Master in Materials science and engineering

Target level
Baccalaureate +5

ECTS
60 credits

Duration
1 year

Component
Grenoble INP - Phelma (Physique, électronique et matériaux), UGA, Grenoble INP - Pagora (Ecole internationale du papier, de la communication imprimée et des biomatériaux), UGA

Language(s) of instruction
English

Presentation

The aim of the Master's program in Biorefinery and Biomaterials (Master's Degree, One Year Graduate Program) is to train professionals specialising in the problems of biomass valorisation, in particular through the development and improvement of processes allowing its transformation into biomaterials, chemical products or energy sources.

This Master's program is available to students who have completed at least four years of higher scientific or 1 year of graduate studies (the equivalent of 240 ECTS credits) education in France or abroad. It is a degree course of the Master in Materials Science and Engineering.

Several scholarships are available, in France or depending on the country of origin, to cover all or part of the tuition fees as well as the costs associated with the studies. This program also includes a final-year internship lasting 5-6 months, either in a company or in a laboratory, which pays around €600 a month if it takes place in France.

The training is part of the themes of the Laboratoire d'Excellence Tec21, de l'Institut Carnot Polynat, du CDP Glyco@Alps, de l'IDEX de l'Université Grenoble Alpes, et du pôle de compétitivité Chimie-Environnement Axelera.
Enseignants académiques et industriels Grenoble INP - Pagora / Grenoble INP - Phelma / INSA Lyon / IMT Mines Albi / IFP Energies nouvelles / CEA Liten.
Partenaires industriels (non exhaustif) Novamont, Dow Corning, Roquette, Cargill, JRS Rettenmaier, Smurfit Kappa, Solvay, Lafarge, Arjowiggings, L'Oréal, Tetra Pak, Arkema, Schneider Electric, Seppic, Novasep, Degrémont, Condat Lubrifiant, Air Liquide, Siegwerk, Fibre Excellence, Total, Soprema, Ahlstrom-Munksjö, CEA, CTP, FCBA, Xylem…

Skills

• Science of materials for nuclear energy
• Durability of materials (fuel and components)

International education : Internationally-oriented programmes

International dimension

With its international dimension, all courses are taught in English. With students from a wide range of backgrounds and origins, this Master's program offers an unprecedented opportunity to meet people from different cultures and thus develop the ability to work and manage projects in an international context.

Admission

Access conditions

This Master's program is available to students who have completed at least four years of higher scientific education or 1 year of graduate studies (the equivalent of 240 ECTS credits) in France or abroad. It is a degree course of the Master in Materials Science and Engineering.

Candidature / Application

See Grenoble INP – Pagora website https://pagora.grenoble-inp.fr/en/education/master-materials-science-and-engineering-program-biorefinery-and-biomaterials-1#page-admission for more information on application timeline and procedures.

Target

The master's SGM - Biorefinery and biomaterials course is open to French and foreign students.
It is available to students who have completed at least four years of higher scientific education in France or abroad. It is a degree course of the Master in Materials Science and Engineering.

Fees

EU citizens: €243 per year

Non-EU nationals: €3879 per year

Prerequisites

All candidates must provide a certificate of English language level:

Mandatory minimum level B1, level B2 strongly recommended, European standards.

Education : at least 4 years of higher scientific education or 1 year of graduate studies in chemistry, biochemistry, processes, polymeric materials or equivalent subjects

And after

Further studies

PhD in Materials Science and Engineering
I-MEP2 Doctoral School
Engineering - Materials, Mechanics, Environment, Energetics, Processes, Production.

Sector(s)

Chemical, material, plastic, cosmetic, detergent, textile, building, packaging, engineering and energy industrial sectors.

Useful info

Contacts

Program director

Julien Bras

julien.bras@pagora.grenoble-inp.fr

Administrative contact

Scolarité Master SGM - Pagora

pagora.contact-masterbio2@grenoble-inp.fr

Partner laboratories

Laboratory of process engineering for biorefinery, bio-based materials and functional printing

https://lgp2.grenoble-inp.fr/en

Course location(s) - City

Grenoble

Campus

Grenoble - Saint-Martin d'Hères

Know more

Find out more on the Grenoble INP - Pagora website

https://pagora.grenoble-inp.fr/en/education/master-materials-science-and-engineering-program-biorefinery-and-biomaterials-1

Program

Specifics of the program

Full program at the following address: https://pagora.grenoble-inp.fr/en/education/master-materials-science-and-engineering-program-biorefinery-and-biomaterials-1#page-presentation