

International Semester in english
Master Level

Paper sciences, bio-refinery & biomaterials

Period of study: Fall semester

30 ECTS package

Materials : cellulosic media 5 ECTS
Paper physics
Paper physics - Labwork
Dimensional stability

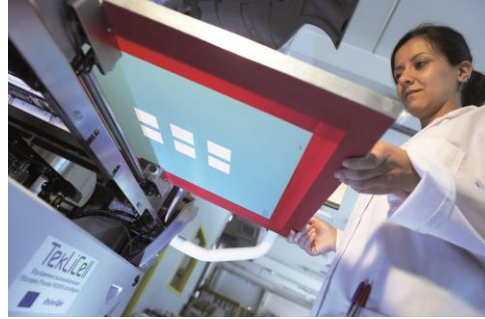
Materials : bio-polymers 5 ECTS
Biopolymers, biocomposites
Polymer structures and properties
Tissue and specialty papers

Project 7 ECTS
Innovative or research project

Paper sciences and processes 7 ECTS
Papermaking science (courses , practice simulator and Labwork)
Energy production in papermaking process

Plant biomass chemistry, valorization & recycling 6 ECTS
Biorefinery
Processes for cellulosic pulps
Recycled fibres





**International Semester in english
Master Level**

Print sciences : processes & materials

Period of study: Fall semester

30 ECTS package

Printing Processes Science 5 ECTS
 Digital printing
 Flexographic printing
 Screen printing
 Offset lithography
 Gravure printing

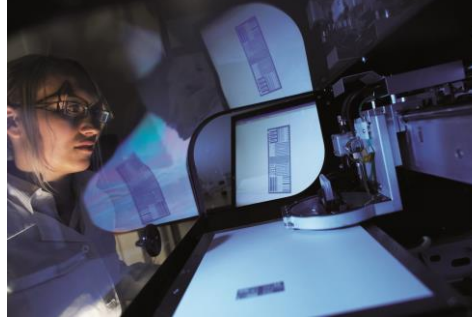
Plurimedia designing project 7 ECTS
 RIP inkjet
 Designing Cross Media Documents
 Development of interactions between
 paper, social media, web, augmented
 reality

Project 7 ECTS
 Innovative or research project

Materials and color 6 ECTS
 Colour management (courses and
 problem based learning)
 Ink science
 Colour physics
 Photochemistry and physics

Materials : cellulosic media 5 ECTS
 Paper physics
 Paper physics - Labwork
 Printing defect (problem based
 learning)





International Semester in english
Master Level

Digital media and functional printing

Period of study : Spring semester

30 ECTS package

Specific computer processes for printing 8 ECTS
Structured Digital Documents XML-DNS
Pre-media technologies
3D printing
Digital files for printing
Networks
Form Web and IT project management

Industrial engineering 6 ECTS
Signal processing (problem based learning)
Sustainable development
Technical intelligence
Production management
Company visits

Printed electronics 5 ECTS
Printed electronics (courses and labwork)
Printed electronics: components
Digital printing
Electronics basics

Project 11 ECTS
Innovative or research project





International Semester in english Master Level

Industrial Processes & Environmental Management

Period of study : Fall semester

30 ECTS package

Treatment Processes 6 ECTS

Solid waste treatment
Filtration and settling
Tertiary treatments
Effluent treatment
Gaseous effluent treatment
Biological effluent treatment

Processes Monitoring 6 ECTS

Waste water treatment-labwork
Sensors
Technical visits
Integrative project on monitoring
Process control

Project 6 ECTS

Industrial or research project

Pollutants & impacts 6 ECTS

Greenhouse gases assessment
global warming and climate change
Ecoconception, lifecycle analysis
Risk management
Renewable energy
Aquatic geochemical cycles and water quality

Management in company 6 ECTS

Quality management
Environmental and Safety and security management
Energy management and performance
Communication

