

MSC WATER ENGINEERING AND WATER MANAGEMENT

The master will provide students with shared theoretical and practically-oriented knowledge in the field of water engineering and water management.

Students in the program should acquire the ability to design water engineering projects and to realize these projects efficiently in line with the principles of sustainability (integration of energy efficiency and mass/energy valorisation).

AIMS OF THE PROGRAM

The master focuses on chemical engineering and hydrology applied to unit operations of water treatment and water sciences (aquatic system and its preservation). The purpose of the lectures is concerned with biological and chemical reactors for pollution removal, unit operations of separation for the high quality water production (membrane separation, adsorption...), hydrology and ecology for the management of aquatic system. In addition, students will follow courses on international regulations, environmental management and project management to be able to face water-related societal, governmental and industrial stakes. Along the two years of formation, the student will have strength interactions with industrial partners and research laboratories.



CONTACT

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APPLICATION

Deadline: 30 may or n+1 program schedule
 Tuitions fees: 9000€/year
 Reduction down to 5000€/year
 for academic partners and selected students
www.toulousetech.net

FOCUS

Masters of Science are national degrees accredited by the French ministry of higher education

Further studies: PhD program (3 years)

All MSc Degree holders are allowable to take a step forward in the academic track to get the PhD degree

Pre-requisite: Bachelor's degree

Programs are taught in french (70%) and English (30%)

INP - ENSEEIHT and INSA are members of the N+i network
www.nplusi.com



RESEARCH INSTITUTIONS &

INDUSTRIAL PARTNERS

Industrial applications of the program are related to desalination, drinking water production, waste water treatment, water reuse, industrial water treatment, eco-conception of processes

INSA is member of the national cluster of Excellence WATER and of the regional cluster of Water, Sensor and Membrane. The laboratories involved in this master are ranked A+, a plus for future students whose education will be closely linked to the research.

JOB OPPORTUNITIES

Job in industries in the environmental sector (water/air/waste treatment eco-industries) or in various other fields (chemistry, petrochemistry, food, pharmacy and cosmetics, specialised materials) to take into account environmental constraints (eco-processes).

PROGRAM CONTENT

Semester 1:

Scientific basis, cultural integration, linguistics and methodology.

Semester 2:

Core courses on waste water treatment and waste water management including energy and mass valorisation

Semester 3:

Water production and water resource management including desalination and water reuse

Semester 4:

Graduation Internship (5-6 months) in academic Laboratories or in Industrial companies.

The first semester is a transition semester with 80h of french courses. If necessary or wished, additional Intensive french courses are available in the summer.



Scholarship possibilities :

- Scholarships from the institution (based upon eligibility and acceptance)
- Scholarships from the French government (Eiffel, Embassies,...)
- Scholarships from the European Union (Erasmus, Leonardo, etc.),
- Scholarships from French regional authorities (cities, Regions, etc..)
- Stipends for the internships in academic labs or industrial companies.



Required documents:

Scientific background:

- bachelor degree in Chemical Engineering or Fluids Mechanics
- or Environmental Engineering
- or Civil Engineering