

# INSA

INSTITUT NATIONAL  
DES SCIENCES  
APPLIQUÉES  
ROUEN NORMANDIE

## HUMAN SCALE, GLOBAL SCOPE

GENERAL  
PRESENTATION

GROUPE  
INSA  
Institut National  
des Sciences Appliquées



Normandie Université



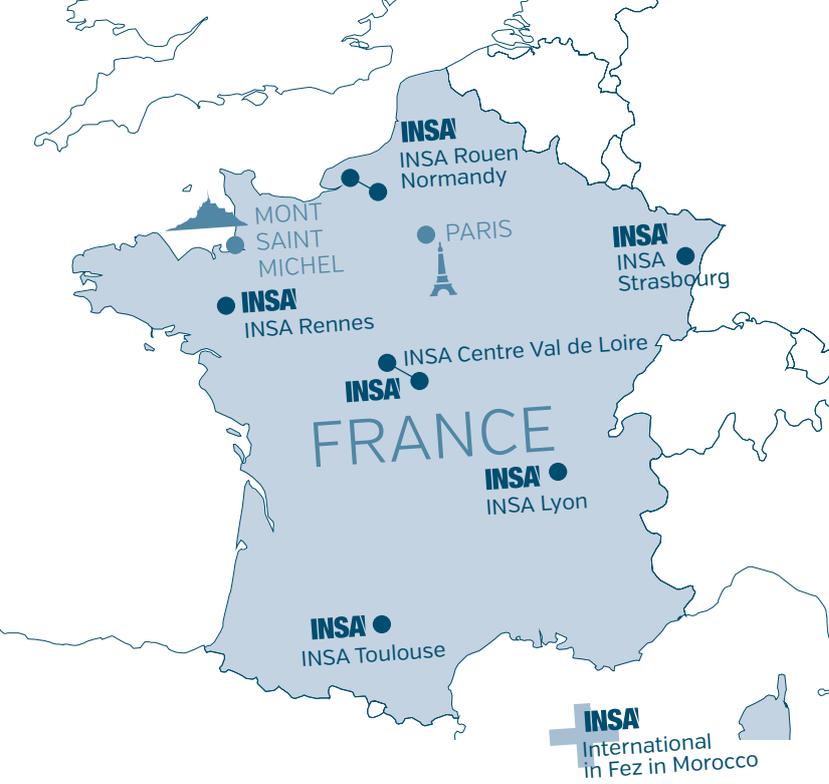
MINISTÈRE  
DE L'ENSEIGNEMENT SUPÉRIEUR,  
DE LA RECHERCHE  
ET DE L'INNOVATION



//  
*A human potential  
in engineering research  
and studies* //



ENGLISH VERSION



## THE STRENGTH OF THE INSA GROUP

INSA Rouen Normandy belongs to France's leading network of public engineering schools. Located in major French metropolises: Centre Val de Loire, Lyon, Rennes, Rouen, Strasbourg and Toulouse, but also in Fez, Morocco. The 6 national INSAs, the first international INSA and their seven partner schools, embody a model that has been recognized for more than half a century throughout the world. INSA Group's dynamism and reputation are based on the quality of multidisciplinary teaching combined with the richness of its interactions with research. This link nurtures the innovations of tomorrow's technologies, deepens and disseminates knowledge, and contributes to the progress of science and culture.

INSA Group's schools train more than 10% of French engineers every year. They have more than 40 engineering specializations and 60 top-level laboratories. 80,000 INSA qualified engineers are now working at an international level.

**A SCHOOL RECOGNIZED FOR ITS ACADEMIC EXCELLENCE AND VALUES**

INSA Rouen Normandy, the first engineering school in Normandy.

**ACCREDITATION**

The Commission des Titres d'Ingénieurs, an independent body responsible for assessing the quality of engineering studies, has recognized the quality of our diplomas by renewing the accreditation of our specialties under student status for a maximum of 6 years. New apprenticeship studies also benefit from the maximum duration of 3 years. Our studies programmes have also obtained the EUR-ACE label, a guarantee of a perfect match with European academic standards.

**VALUES AND COMMITMENTS**

Excellence, Diversity, Parity, Employability are the values INSA Rouen Normandy.

## HUMAN SCALE, GLOBAL SCOPE

INSA Rouen Normandy (National Institute of Applied Sciences) holds a very strong position within the french higher education system of engineering schools. Its missions (teaching, research and the dissemination of scientific culture) revolve around four poles of expertise associated with a transversal theme: risk management:

 **INFORMATION SYSTEMS - MATHEMATICAL MODELLING AND SIMULATION - DIGITAL**

Computing, Finance, Imaging and Artificial Intelligence in the 21st century. The marriage of Computer Science and Mathematics is an area of economic activity and represents a pole of competence in many areas such as Information Systems (from sensor to user), Finance or Multimedia Systems.

 **CHEMISTRY - HEALTH - PROCESS ENGINEERING - INDUSTRIAL ECOLOGY**

An long tradition in Chemistry and Process engineering for a response adapted to the world of today and tomorrow. This division benefits from 90 years of experience in engineering studies and research dedicated to Organic Synthesis, Polymer Materials and Process Engineering. Its mission is to design controlled and secure industrial systems that respect and protect the environment, to develop medicinal molecules, to develop more efficient polymers...

 **ENERGIES - PROPULSION - MECHANICS - MATERIALS**

Engines, Combustion, current and future Mechanical Systems. This division is dedicated to Mechanics, Energy and Energy efficiency as well as Energy and Industrial Performance. It develops studies and research in the field of Energy Sciences and associated materials and their impacts (new systems applied to Propulsion, Depollution, Combustion / new materials for Energy, Nuclear, Bio-polymers, Eco-Materials, Clean Energy...).

 **CIVIL ENGINEERING - SUSTAINABLE CONSTRUCTION - URBAN PLANNING**

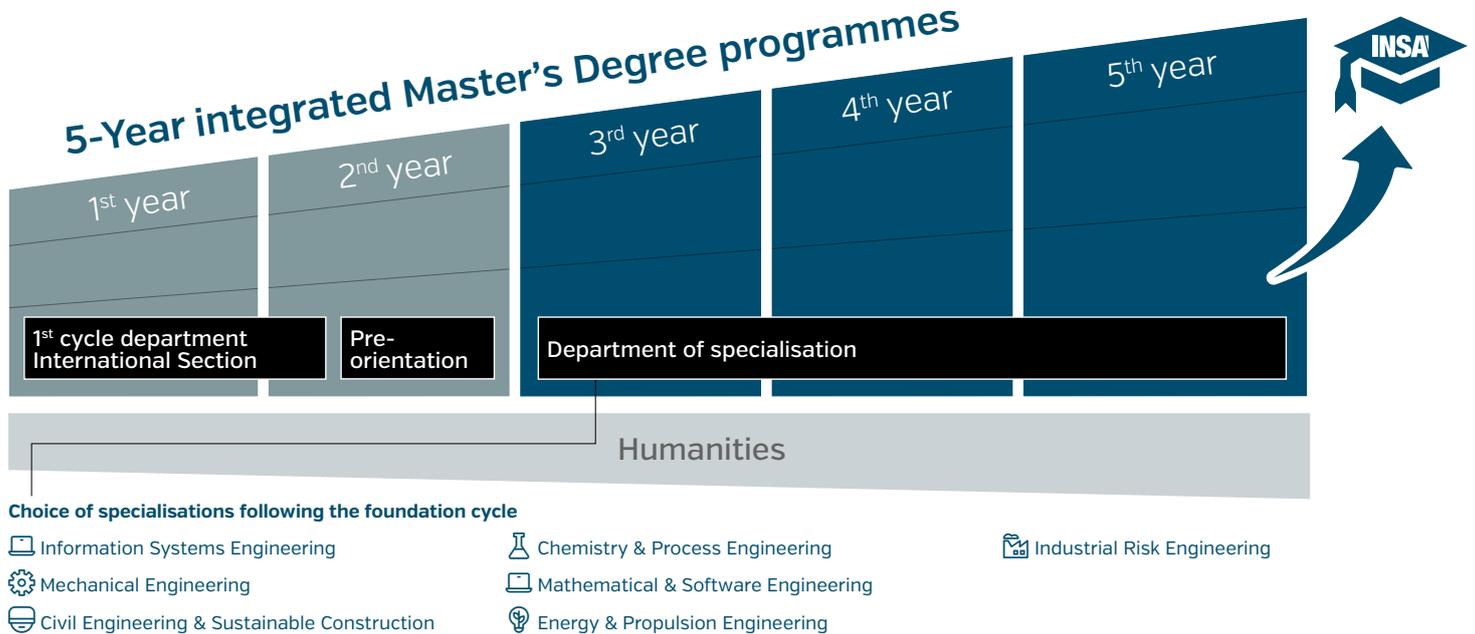
A response to today's needs in the public and private sectors. The objective of this fourth cluster is to systematically take into account environmental issues in all areas related to buildings and structures, while also integrating the constraints linked to land use planning and urban planning. INSA Rouen Normandy has joined forces with the University of Le Havre and ESITC Caen.



# THE CHOICE OF SUCCESS

INSA Rouen Normandy cultivates the diversity of profiles and relies on the personality of its future professionals. INSA engineers have high-level scientific and technological skills combined with intellectual qualities such as the ability to analyze and synthesize, react and advise. Their ability to manage and develop optimal working methods, Their capacity for adaptation and anti-

icipation are combined with a sense of openness to complementary fields such as innovation, entrepreneurship or culture. The five years of study offer a progressive and thoughtful orientation, allowing awareness project management and interculturality from the first year onwards of the world of business.



# A WIDE CHOICE OF COURSES

International students have the opportunity to prepare for the INSA engineering degree by joining the international bilingual section (SIB) after their baccalaureate, after one year in higher education, or after a national or specialized Master's degree (M1).

## GENERALIST STUDIES - YEARS 1 AND 2

- In the classical section Sciences and Techniques for Engineers (STPI) It is reserved for francophone students only. (French C1 level).
- Bilingual section International Bilingual Section (SIB)  
Since 1999, international bilingual studies have been preparing future professionals for the requirements of mobility and working in international teams by providing teaching similar to the traditional section (the scientific programme and educational methods are identical to the classical section) but with a specific implementation since half of the studies are in English. A 3-week summer school prepares students for the integration in the international bilingual section.

## ENGINEERING CYCLE - YEARS 3-4-5

These courses are available at levels 3 and 4, in preparation for the INSA engineering degree or as part of an exchange for 1 or 2 semesters of study.

- Architecture of Information Systems
- Chemicals and Processes
- Energy and Propulsion
- Civil Engineering
- Mathematical Engineering
- Industrial Risk Management
- Mechanical

## MASTERS

Access available in M2 (after an M1) or after a Bachelor's degree for the Master Design Engineering.

- Chemicals
- Energy
- Civil engineering
- Design engineering
- Engineering of Complex Systems [ESIGELEC]
- Mathematics and Applications
- Science and Data Engineering

## DOCTORATES - 3 CLUSTERS OF EXPERTISE - 8 LABORATORIES

INSA Rouen Normandy holds a very strong position within the french higher education system of engineering schools. Research themes stem from our three poles of expertise through a synergy between courses, research laboratories and the two Centers for Technological and Industrial Studies and Research [CERTI]. They enable us to provide an open-ended response to the major challenges of knowledge and society.

INSA is delegated by Normandie-Université for the preparation of Doctorates. The school is part of two doctoral schools:

- Normandy Doctoral School of Chemistry
- Doctoral School of Physics, Mathematics and Information Sciences for the Engineer

## KEY FIGURES

- 10 engineering courses
- 2 specialized masters courses
- 7 research masters
- 3 doctoral schools
- 30 theses defended per year
- 8 research laboratories
- 39 million euro budget
- 1,800 students
- 335 graduate engineering students per year
- 480 teaching, research, administrative and technical personnel
- 400 freelancers
- 110 PhD students
- 7 student residences

# RESEARCH AND DEVELOPMENT - A DRIVING FORCE OF THE SCHOOL

With eight laboratories, including four joint CNRS research units, the institute actively contributes to the influence of Norman scientific culture in France and throughout the world in close collaboration with the universities of Rouen, Le Havre and the Community of universities of Normandy, INSA Rouen Normandy pursues a real desire to be transversal in all sectors of activity such as Aeronautics and Space, Pharmacology, En-

vironment, Automotive, Computer Science, etc. Studying these themes through a synergy between courses, research laboratories and the CERTI (Centers for Technological and Industrial Studies and Research) allows us to provide an open-ended answer to the current and future technological challenges.

INSA Rouen Normandy has also been recognized by international juries for future investments.

The school is thus proving its ambition in terms of research and support for economic development in the fields of Health (inventing new drug molecules) and Energy (developing materials for Energy and Clean Combustion).

As part of these investments for the future, INSA Rouen Normandy, along with its partners, has been awarded different prizes.

## INTERNATIONAL - ENGINEERING PROFESSIONALS "MADE IN FRANCE"

The school's reputation crosses the borders of Europe. Our 4,700 INSA Rouen Normandy graduates working all over the world, present in American, European and Asian universities or companies, are recognized and sought after for their high level of engineering, their adaptability and managerial skills.

Each year, INSA Rouen Normandy welcomes 450 international students of 45 different nationalities out of a total enrolment of 1,800 students. The international bilingual section, several modern languages, more than 20 double diplomas or joint diplomas with Brazil, Germany, England, etc., internships and years of studies abroad are the strong points of the education of future engineers.

INSA Rouen Normandy has been interacting for 30 years with international partners from the sector of education, industry and research and has established more than 130 partnerships with prestigious schools and universities around the world. INSA's curricula are part of the LMD programme (Licence, Master's, Doctorate), making it clear that it can be read internationally and increase its exchanges within the European network of universities.

**INSA**  
ROUEN NORMANDIE

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## COMPANIES AT THE HEART OF INSA ROUEN NORMANDY

INSA Rouen Normandy's mission is to train, innovate and associate... all of these missions are known and recognized by the companies involved. They have made it possible to establish close and long-lasting collaborations with regional, national and international companies, major groups and SMEs in both education and research.

Private companies are not the only natural outlet for our students, but they are also an educational partners that accompanies them from the time they enter school to the day they graduate. During the five years of studies, our engineering students must complete at least three in-company internships. Each year, more than 900 INSA Rouen Normandy trainees irrigate French and international companies.

Companies are also involved in our courses, either as part of one-off interventions (seminars, conferences, visits, etc.), to propose industrial or R&D projects, or by contributing to open up new sectors or contributing to the evolution of the courses offered at INSA.

*Some of our international partner companies*

