CAMPUS
LE HAVRE-NORMANDIE

SCIENTIFIC RESEARCH SUPPORT

Because scientific progress contributes significantly to the attractiveness of a territory, Campus Le Havre Normandie works hand in hand with local researchers to carry out research projects that reflect the characteristics and resources of the Le Havre region.

Ambitions of excellence and acknowledgement

The local scientific research support policy aims to :

- Improve the visibility and increase the attractiveness of ongoing research activities and contribute to local economic activities
- Promote scientific excellence, through original projects that are useful to the local community
- Provide research teams with an organisational structure to help them be acknowledged for their work nationally and internationally

This policy materialises through research facility support, scientific project funding, and through the organisation of national and international events.

Fourteen fundamental and applied research facilities

GREAH - Groupe de Recherche en Electrotechnique et Automatique du Havre - EA

GREAH is the electrical engineering and automation research unit of the University of Le Havre Normandie. Its three research lines are :

- Renewable energies and power storage
- Electromechanical actuators and drive systems
- System advance control and operating safety

LITIS - Laboratoire d'Informatique et du Traitement de l'Information et des Systèmes

LITIS is the information science and technology research unit of Haute-Normandie. It involves three major higher education institutions from the area : the University of Rouen, the University of Le Havre, and INSA Rouen Normandie. Its three research lines are :

- Access to information
- Biomedical information processing
- Ambient intelligence

LMAH - Laboratoire de Mathématiques Appliquées du Havre

LMAH carries out academic and applied research studies at the local, national, and international levels. LMAH focuses on the modelling and analysis of complex systems, a single research line with two main applications :

- The modelling of living systems
- The modelling of logistics systems

↓ o LOMC – Laboratoire Ondes et Milieux Complexes (attached to CNRS)

LOMC is a research unit dedicated to the study of :

- Mechanical wave propagation (acoustic, ultrasonic, or nonlinear waves and instability in fluids)
- Material behaviour (porous media, composite materials, ionised media)
- Coastal and port engineering, geo-environmental, and non-destructive structural testing applications

LOMC develops experimental techniques and digital or theoretical tools useful to each research line.

↓ o SEBIO – Stress Environnementaux et BIOsurveillance des milieux aquatiques (attached to ENERIS)

SEBIO studies the effects of contaminants on aquatic organisms and develops tools for water quality biomonitoring. SEBIO also carries out research on :

- Reproduction and endocrinology (https://www.univ-reims.fr/site/laboratoire-labellis/sebio/activit-de-recherche/th-s-de-recherche/reproduction-et-endocrinologie,16483.html?)
- Immune defences (https://www.univ-reims.fr/site/laboratoire-labellis/sebio/activit-de-recherche/th-s-de-recherche/d-nses-immunitaires,16484.html?)
- Energy and metabolism (https://www.univ-reims.fr/site/laboratoire-labellis/sebio/activit-de-recherche/th-s-de-recherche/energie-et-m-bolisme,16485.html?)

↓ URCOM - Unité de Recherche en Chimie Organique et Macromoléculaire

URCOM is a multidisciplinary research unit dedicated to the study of organic molecules with pharmaceutical potential and polysaccharide-based systems

URCOM is involved in fundamental and applied research projects in partnership with several institutions and partner companies.

EDEHN - Équipe d'Économie Le Havre Normandie

EDEHN is a research unit dedicated to the economic analysis of public policies. The research works carried out cover numerous branches of economics (environmental, development, labour, social, regional, urban policy, cultural, and conflict economics, etc.) and use different methodological approaches (theoretical and applied modelling, empirical studies, history of economic thought, economic anthropology, etc.).

IDEES - Identité et Différenciation des Espaces de l'Environnement et des Sociétés (attached to CNRS)

IDEES is a multidisciplinary humanities research unit attached to the Universities of Caen, Le Havre, and Rouen. Its five main research lines are :

- Port environments, transport, and travel
- Authorities, globalisation, and social and territorial reconfiguration
- Health, hazard, and life trajectory
- Digital communities
- Models, simulations, and temporality considerations

LexFEIM - Laboratoire d'études en droits fondamentaux des échanges internationaux et de la mer

LexFEIM works on three main research lines :

- The fundamental rights of human beings
- International relationships
- Port and maritime activities law

GRIC - Groupe de Recherche Identités et Cultures

GRIC is a multidisciplinary language, literature, and humanities research unit dedicated to the analysis of aesthetic encounters and cultural exchanges. GRIC carries out studies on social and cultural transformations by focusing on individual and collective identity issues and on the interactions between literature, art, history, and language. Its main research lines are :

- Heritage, ethnic inclusiveness, and diversity
- Literature at the crossroads of humanities (TRANSLATIO)

NIMEC - Normandie Innovation - Marché Entreprise Consommation

NIMEC is the management science research unit of Normandie. It is attached to the Universities of Caen, Le Havre, and Rouen. Its main research lines are :

- Innovation and cooperation (https://www.nimec.fr/nimec-lab/innovation-cooperation)
- Cultures, identities et consumerism (https://www.nimec.fr/nimec-lab/cultures-identites-consommation)
- Organisational behaviour and managerial stances (https://www.nimec.fr/nimec-lab/comportement-organisationnel-postures-manageriales)

TRAFIS Lab - Laboratoire de recherche appliquée pour la facilitation des échanges et le développement de la logistique numérique

TRAFIS Lab is a public-private applied research facility dedicated to trade facilitation and digital logistics tool development. It involves the French Customs, HAROPA (Ports of Le Havre, Rouen, and Paris), SOGET, and ISEL.

TRAFIS Lab aims to develop a competitive trade facilitation solution designed to address the new challenges of international freight transport and trade.

RADIAN - Recherche Art Design Innovation Architecture Normandie

RADIAN is a research unit attached to ESADHaR, ESAM Caen/Cherbourg, and ENSA Normandie. Its three research lines are :

- The scope of the visible
- Architecture and sensitive devices
- Research at ESAM

METIS LAB – EM Normandie Business School

The EM Normandie Business School shares its expertise with professionals by carrying out applied research through the creation of chairs and the completion of research contracts and appraisal missions.

METIS is an independent research unit. Its four research lines are :

- Entrepreneurial Performances and Transformations (https://www.em-normandie.com/fr/axe-de-recherche-metis-performances-et-mutations-entrepreneuriales)
- Working and Living in Fluid Organisations (https://www.em-normandie.com/fr/axe-de-recherche-metis-travailler-et-vivre-dans-des-organisations-fluides)
- Land and Sea Logistics and Hazard (https://www.em-normandie.com/fr/axe-de-recherche-metis-logistique-terre-mer-risque)
- International Business Networks (https://www.em-normandie.com/fr/axe-de-recherche-international-business-networks)

Dedicated local partners

Supported by the Normandy Region and Le Havre Seine Métropole, these fourteen research facilities play a major part in the global strategy carried out by the Normandy Region and ComUE Normandie Université, in partnership with five Réseaux d'Intérêts Normands (RINs) :

- Normandy Energy and Materials
- Normandy Humanities and Society
- Normandy Biomedicine and Chemistry
- Normandy Land and Sea
- Normandy Digital

This strategy is further reinforced by the **co-funding of PhD scholarships – in partnership with the Normandy Region** – for local research projects. These scholarships aim to encourage the development of research projects by thesis students on the campus.

In 2020, Le Havre Seine Métropole has invested nearly 300,000 euros in PhD student works for university theses related to the characteristics of the area (electrical engineering, information sciences and technology, mechanical wave propagation and material behaviour, water quality biomonitoring, cultures and identities, digital logistics, etc.).

Theses supported in 2023

SLC (Smart Legal Contract): Automation of contractual executions for logistics transactions, Laboratory of Computing, Information Processing and Systems (LITIS)

DISTAN: Autonomous and coordinated navigation in a distributed context, Le Havre electrotechnical and automatic research group (GREAH)

DEPAPI: Environmental Dispersions of Particles in Pickering Emulsion, Organic and Macromolecular Chemistry Research Unit (URCOM)

CARULE: Ultrasonic Characterization of Internal Erosion of Media with Multiple Porosities, Waves and Complex Media Laboratory (LOMC)

Placing the consumer at the heart of thinking about food, Identity and Differentiation of Space, Environment and Societies (IDEES)

21 theses are supported today by Le Havre Seine Métropole.

› More information on PhD scholarships and RIN co-funding (https://aides.normandie.fr/rin-recherche-2020)

Main events

Several scientific events are regularly organised and hosted in the Le Havre area, and more specifically on the campus.

These national and international events enhance the influence of the local scientific education and research community.

Since 2008 and the implementation of the scheme, Le Havre Seine Métropole has contributed to the organisation of approximately 60 conferences, including 27 international conferences.

In spite of the health crisis, Le Havre Seine Métropole supported 5 conferences in 2020 :

- The River Seine underworld
- Intersectionality in English-language movies and TV series
  - GRIC laboratory
- Logistics Researchers International Assembly
  - NIMEC laboratory
- General Symposium of the National Physics and Chemistry in the Interstellar Medium Programme
  - LOMC laboratory
- DEVPORT 3 : Ports, maritime transport, and regional development : globalisation, effects of scale, and environment
  - IDEES laboratory