BRETAGNE BREST

3 WEEKS

QUALITÉ

BRETAGNE

Science & technology OF THE SEA

Ciel Bretagne, in association with Campus France, Technopôle Brest Iroise, and Campus Mondial de la Mer, offers English-speaking students with beginner-level French a 3-week program of visits to companies and state-of-the-art laboratories (conducted in English). conferences on current and future challenges facing the engineering professions, and courses in French as a foreign language. The program also includes a wide selection of excursions and cultural visits centered on the theme of "Science and technology of the sea".

Ciel Bretagne Ecole de français langue étrangère

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Ciel Bretagne is affiliated with the Bretagne Ouest chamber of commerce and industry and has been teaching French as a foreign language for 30 years. Each year it welcomes between 700 and 1,000 students from all over the world.

International groups enable all participants to increase their knowledge of French, while excursions allow them to discover the natural and cultural heritage of beautiful Brittany.

Research efforts in science, information, and digital technology are particularly intense in and around Brest, which, combined with Brittany's maritime heritage and focus, makes the theme of marine science and technology an obvious choice. The Brest area is Europe's leading marine research center in terms of the number of people, institutions, and companies involved in marine science and technology.

CIEL BRETAGNE - BREST



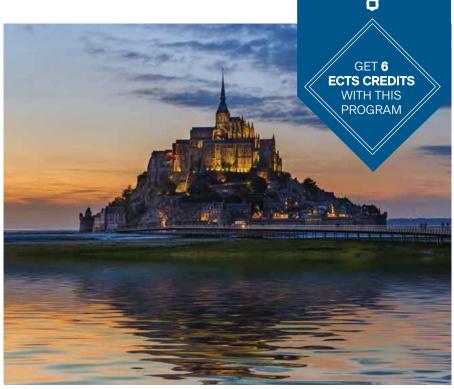


The concentration of activity makes Brest one of the world's leading marine research areas. Brest has invested massively in the development of marine resources, for example, through an investment of more than €200 million to attract and support companies active in the field of sea-based renewable energies.

The city's university campus is also focused on the sea, with the European Institute for Marine Studies, a maritime law track in the law school, and ocean-oriented schools of engineering.

Other important actors in the sector - such as Ifremer, the Ecole Navale, Shom, and Cedre - also operate in and around Brest.

It is in this context that Ciel Bretagne has developed a program that enables students to improve their French while exploring one of the **most beautiful regions of France** and advancing their knowledge of one of the most promising fields for the future of our planet.





- French-language instruction and thematic activities cover 30 hours a week over 3 or 4 weeks:
- > 15 hours of instruction each week in French as a foreign language, enabling students to acquire or improve their oral and written

communication skills;

- A program of visits to companies and institutes specialized in the field of marine resources;
- A program

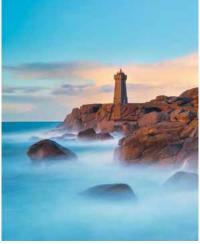
 of cultural visits
 to discover
 the attractions of
 the Brittany region.

Non-contractual program, subject to change. A minimum of 10 students is required.



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MONDAY

> Morning French language study

> Afternoon Visit to Brest: the history of the city viewed through its maritime past Brest has always been marked by its proximity to the sea, and that remains true today. Students

discover the multiple facets of the city: its ports; the Rade, a sheltered bay of 180 km² that provides ideal conditions for water sports all year; its castle; and the famous Rue de Siam.

Welcome reception at Brest city hall.



TUESDAY

> Morning French language study

> Afternoon Visit to Technopôle Brest Iroise A presentation on the region's vibrant maritime culture provides a good view of scientific activity in and around Brest, where 60% of French research linked to the sea is conducted. Brest is home to the highest

concentrations of research and development in Europe in fields such as marine safety and security, development of sea-based renewable energy, and exploitation of marine biological resources.

WEDNESDAY

> Morning French language study

> Afternoon Energy from the sea

The scarcity and rising cost of resources has focused attention on the diversification of global energy production. This was the challenge that Sabella accepted in 2008 when the company deployed Sabella D03, the first French marine turbine. The experimental marine turbine, 3 meters in diameter, was successfully tested for a year in Brittany off the island of Ouessant. DCNS, another firm involved in marine turbine projects, is planning to deploy seven turbines in the Raz Blanchard, in Normandy, in 2018.

THURSDAY

> Morning French language study > Afternoon Visit to the University

In the course of a visit to the Université de Bretagne Occidentale students will have an opportunity to meet science students and discuss their projects.

FRIDAY

> Morning French language study

> Afternoon Free

SATURDAY

> Morning Free

> Afternoon A Brittany Tour Excursion to Quimper, capital of the Cornouaille region and a town of historical and artistic interest. The group will walk through the town's narrow streets, with their distinctive half-timbered houses, stopping to visit the cathedral and the museum of Breton culture.

Leaving Quimper, the group will stop in Concarneau to visit a fish cannery and explore the ramparts and tower of the old town.





MONDAY

> Morning French language study

> Afternoon Shellfish aquaculture: visit to the hatchery of Tinduff

The hatchery was created in 1983, after fishermen realized that the sea's natural resources were not infinite. The hatchery reseeds the Rade of Brest and works closely with other fisheries. From Granville to La Rochelle, the fisheries buy spat to reseed their beds. The hatchery is currently working on another species: the scallop Chlamys varia, in response to the need to diversify the fishery.



TUESDAY

> Morning French language study

> Afternoon Visit to an engineering school Overview of engineering education in France; encounters with students.



WEDNESDAY

> Morning French language study

> Afternoon Cedre is a nonprofit set up after the spill from the tanker Amoco Cadiz Its goal is to improve France's capacity to respond to pollution from accidents.

Cedre is responsible for the documentation, research, and experimentation on pollutants, their effects, and how to deal with them.

THURSDAY

> Morning French language study

> Afternoon Visit to Océanopolis

An aquarium with European dimensions and a recreational center focused on the oceans. With three pavilions - tropical, polar, and temperate (around Brittany) - there is a vast amount to see! The otter trail is exceptional.



FRIDAY

> Morning French language study > Afternoon Free

..... SATURDAY

> Morning Free > Afternoon "The Wonder of the West

Mont-Saint-Michel stands in the middle of a vast bay surrounded by Europe's most extreme tides.



WEEK

MONDAY

> Morning French language study

> Afternoon TechNature Laboratories

Founded in 1986 by Christine Bodeau, a biochemist fascinated with algae, is today France's leader in the design of marine health care products for spas and thalassotherapy centers.



TUESDAY

> Morning French language study

> Afternoon Workshop/ role play

On the interaction between nature and human societies in coastal zones.

WEDNESDAY

> Morning French

language study

> Afternoon The Roscoff laboratory is a research and teaching institute for marine biology and oceanography. Research areas include the cell cycle of the sea urchin; the biochemistry and development of brown and red algae; the ecophysiology of hydrothermal fauna and their adaptation

to extreme environments; the diversity of phytoplankton and zooplankton; evolution and population genetics; and benthic ecology. Research is being conducted on chemical tracers to understand the circulation of masses of ocean water





THURSDAY

> Morning French language study

> Afternoon Meeting with

a chef The art of algae in Breton cooking



FRIDAY

> Morning French language study

> Afternoon Free



> Departure

