

BORDEAUX

# Summer Schools



May > September, 2022

université  
de **BORDEAUX**

## *Bordeaux Summer Schools*

- › The University of Bordeaux organizes **summer schools** that offer a range of high-quality, multidisciplinary, international courses **for graduate and doctoral students as well as young researchers**.
- › **In 2022**, the Bordeaux Summer Schools program is launching a wide range of disciplinary themes. Courses take place between May and September and cover very different disciplines ranging **from African studies to social sciences to wine sciences to advanced materials to health sciences and more!** These summer schools are highly selective and target international talents. Course content offers an enriching curricular experience with, depending on the discipline, a mixture of theoretical and practical training that demands a notable level of expertise and knowledge.
- › Candidates must fulfill the specific requirements of their summer school of choice. Applications are examined and accepted based on the criteria of the summer school in question.

## Agenda 2022\*

- › **May 2nd – May 6th**  
Sustainable African cities: multidisciplinary research to meet health, demographic, economic and political challenges
- › **May 30th – June 3rd**  
Internet of things
- › **June 7th – June 10th**  
Philosophy in biology and medicine
- › **June 22nd – June 24th**  
Percutaneous interventions in congenital heart diseases
- › **June 27th – July 1st**  
Cardiac electrophysiology
- › **July 4th – July 8th**  
Materials to Technologies for advanced Energy Storages
- › **July 4th – July 8th**  
Today's families
- › **July 18th – July 22nd**  
ECNP Immuno-NeuroPsychiatry
- › **July 18th – July 30th**  
Introduction to experimental neuroscience
- › **August 29th – September 2nd**  
Wine and sake: the cutting-edge of oenology and sakeology
- › **Fall 2022**  
Advanced mass spectrometry applied to cultural heritage

*\*Program may be subject to change depending on the evolution of the COVID-19 pandemic and / or other factors.*

*Please consult our website [www.u-bordeaux.com](http://www.u-bordeaux.com) for the latest information.*

## About the University of Bordeaux

### Education



56,000 students



6,200 international students



250 Master programs



1 Graduate Research School,  
8 doctoral schools



2,000 doctoral students



700 partner universities based in  
over 80 countries worldwide

### Research



11 research departments



70 research laboratories under joint  
supervision with national research  
organizations (CNRS, Inserm, INRAE,  
CEA, etc.)



22 international joint research  
laboratories



4,000 academic and research staff



130 EU collaborative projects



Public health, Economics, Political science

## Sustainable African cities: multidisciplinary research to meet health, demographic, economic and political challenges

May 2nd - May 6th, 2022

This online summer school is open to graduate and doctoral students as well as professionals interested in the topic of development in Africa, and especially the unique challenges facing African cities. These challenges include: rapid urbanization within a context of limited economic growth, threats resulting from climate change, uncontrolled road traffic and the expansion of polluting industries. Course content provides participants with a critical and complementary analysis of the evolution of African cities over the past 20 years, as well as the challenges and opportunities for the next ten years in the context of the Sustainable Development Goals (SDGs) agenda.

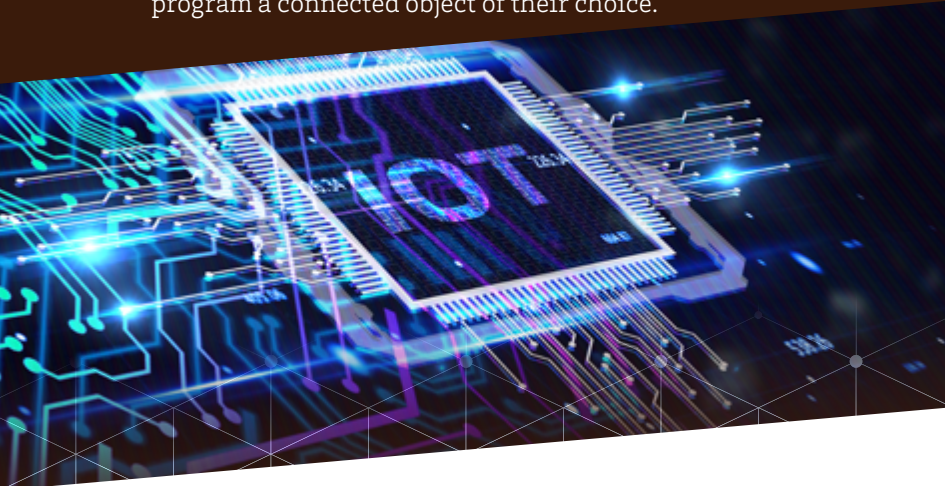


Electrical engineering, Computer science,  
Applied mathematics

## Internet of things

May 30th – June 3rd, 2022

This summer school is designed for graduate and doctoral students from the fields of electrical engineering, computer science, data science and applied mathematics, and who have an interest in the topic of the Internet of Things and its environmental and societal impacts. Course content covers a wide scope of themes, from radio communications to data processing and artificial intelligence, and their applications in e-health, energy harvesting, intelligent transport systems and more. Hands-on tutored workshops complement the theoretical sessions, enabling participants to design, create and program a connected object of their choice.



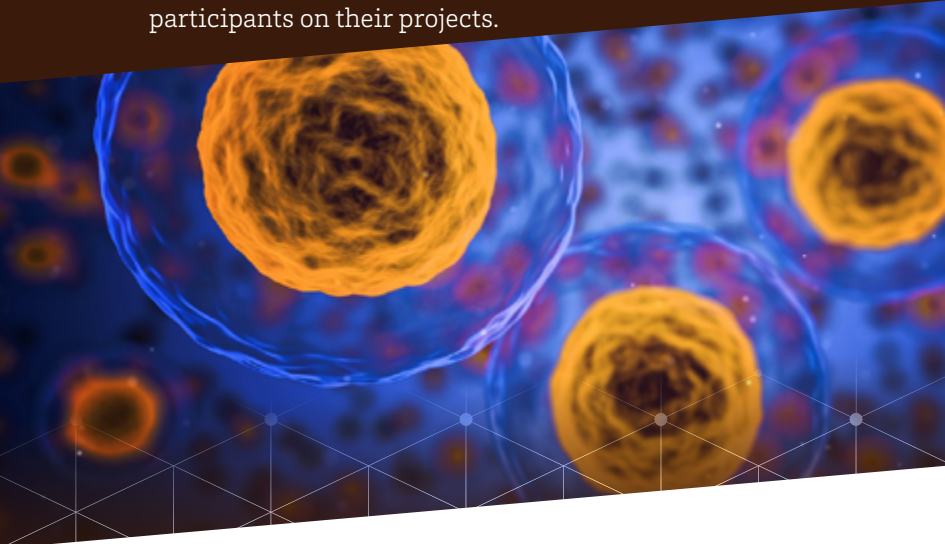


Philosophy, Life science, Medicine

## Philosophy in biology and medicine

June 7th – June 10th, 2022

This summer school is open to second year Master students, doctoral students and post-doctoral fellows from the fields of philosophy, life sciences and medicine. Participants will learn to use interdisciplinary methods to address conceptual issues in scientific research. Course leaders will be present throughout the week providing examples of interdisciplinary research based on their own experience, as well as interacting and advising participants on their projects.





Cardiology

## Percutaneous interventions in congenital heart diseases

June 22nd – June 24th, 2022

This summer school, dedicated to congenital heart diseases and percutaneous therapies, is open to international science and medical students, engineers and experienced researchers wishing to improve their background knowledge.

Course content offers intensive practical classes about the technological aspects of CHD transcatheter interventions, from innovative concepts to clinical practice, including all aspects of device development.



[www.bss-congenital-heartdisease.u-bordeaux.fr](http://www.bss-congenital-heartdisease.u-bordeaux.fr)





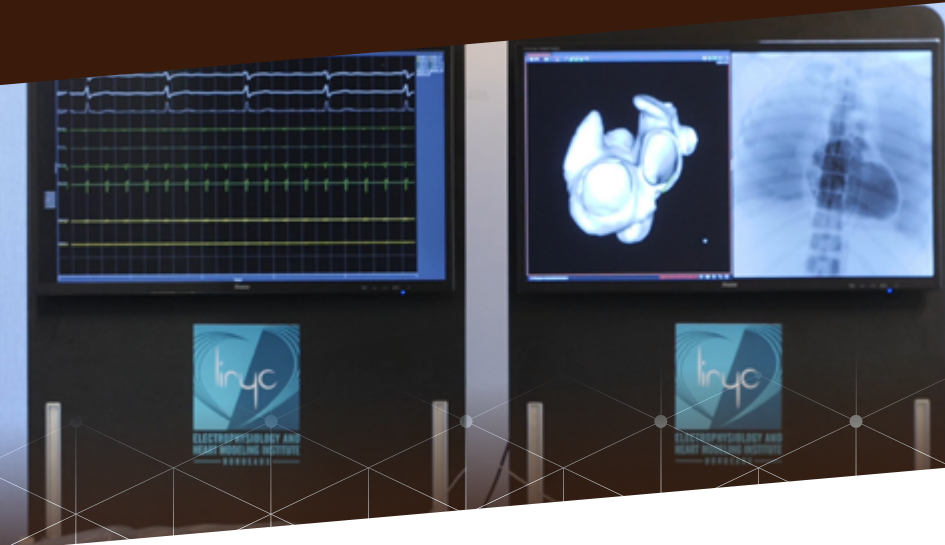
Cardiology

## Cardiac electrophysiology

June 27th – July 1st, 2022

This summer school is dedicated to the study of fundamental cardiac electrophysiology. It is open to international science and medical students, engineers and experienced researchers wishing to improve their background knowledge.

Course content offers intensive theoretical and practical sessions concerning all aspects of cardiac electrophysiology, from the molecular level to pre-clinical investigations and patient care.



[bss-cardiac-electrophysiology.u-bordeaux.fr](http://bss-cardiac-electrophysiology.u-bordeaux.fr)



Energy

## Materials to Technologies for advanced Energy Storages

July 4th – July 8th, 2022

This summer school, open to graduate and doctoral students, focuses on the problems linked to the collection of renewable energies (photovoltaic, wind, etc.), their transformation (hydrogen production, etc.) and their storage (supercapacitors, batteries, etc.).

Course content will train future leaders in the field of energy materials for energy conversion and storage. Practical sessions, as well as a capstone, will be organized, thus complementing theoretical sessions. Issues related to the systems needing to be implemented for such procedures with renewable energies will also be covered.



bss-energy.u-bordeaux.fr



Neuroscience, Human science,  
Social science

## Today's families

July 4th – July 8th, 2022

Throughout this unique summer school, open to doctoral students, post-doctoral fellows and researchers, participants will reflect upon the meaning of family in today's social environment: its characterization, importance, and associated challenges.

The role played by family in our daily lives is constantly evolving, and as such touches a variety of different disciplines. However, current research often remains too confined to its specific, singular field. By offering an interdisciplinary perspective, course content will allow for exchanges in order to define future research guidelines and enhance international collaboration, thus contributing to innovation on this important subject.

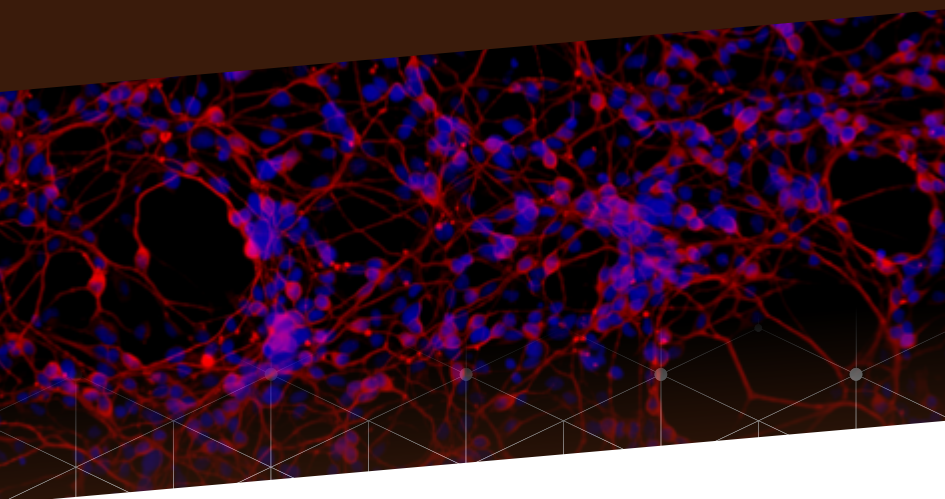


Neuroscience

ECNP  
Immuno-NeuroPsychiatry

July 18th – July 22nd, 2022

This interdisciplinary summer school is open to graduate students, doctoral and post-doctoral researchers from the fields of psychiatry, psychology, biology and medicine. Course content focuses on dimensional approaches in psychiatry, preclinical models and methods to measure immune markers. Lectures on hot topics in immunopsychiatry will be given by internationally renowned scientists from the field.



[www.bss-immunoneuropsychiatry.u-bordeaux.fr](http://www.bss-immunoneuropsychiatry.u-bordeaux.fr)



Neuroscience

## Introduction to experimental neuroscience

July 18th – July 30th, 2022

This summer school offers participants the unique opportunity to discover methods and concepts in neuroscience research through hands-on training within the premises of the Bordeaux School of Neuroscience. Graduate and doctoral students from various disciplines will follow case-based teaching by taking part in mini-projects supervised by experienced doctoral students and international experts in neuroscience.



[www.bss-neurosciences.u-bordeaux.fr](http://www.bss-neurosciences.u-bordeaux.fr)



Oenology

## Wine and sake: the cutting-edge of oenology and sakeology

August 29th – September 2nd, 2022

This summer school is organized within the framework of bilateral collaborations between the University of Bordeaux and the University of Niigata (Japan). Promoting joint scientific activities in oenology and sakeology, it is open to graduate students, doctoral students, researchers and professionals.

Course content will focus on the current scientific, technical and economic issues facing the wine and sake industries. Tutored work sessions will allow participants to develop research ideas for project proposals in their areas of expertise.



[www.bss-oenology.u-bordeaux.fr](http://www.bss-oenology.u-bordeaux.fr)



Analytical chemistry, Cultural heritage

## Advanced mass spectrometry applied to cultural heritage

Fall 2022

This summer school is an innovative and inter / multi-disciplinary training based on advanced mass spectrometry to decipher the complexity of cultural heritage material, i.e. artworks, archaeological and palaeological materials, via their organic macromolecular signatures uncoding (proteins, lipids, polysaccharides). The program is open to doctoral students, post-doctoral researchers, academics, as well as private and museum actors in analytical and heritage sciences. Course content combines lectures and workshops in sample preparation, current mainstream mass spectrometry techniques and their most recent improvements, omics, and bioinformatics, all within the framework of cultural heritage.



[bss-appliedchemistry.u-bordeaux.fr](http://bss-appliedchemistry.u-bordeaux.fr)





Février 2022 - université de bordeaux - direction de la communication - crédits photos © université de bordeaux, Arthur Pequin, Chempetitive, Adobe Stock, Max Pixel, Liryc, C. Lebedinsky, C. Tokarski, CNRS

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