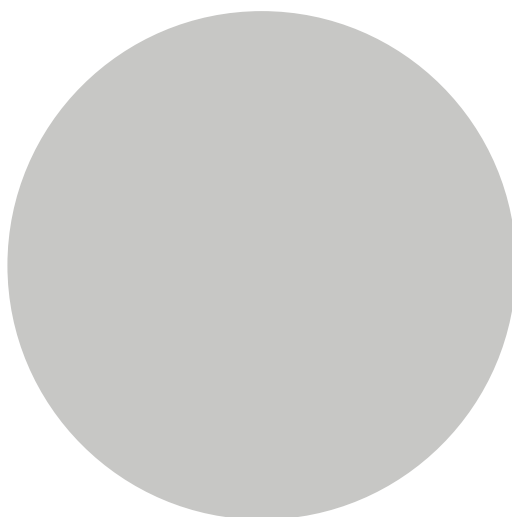
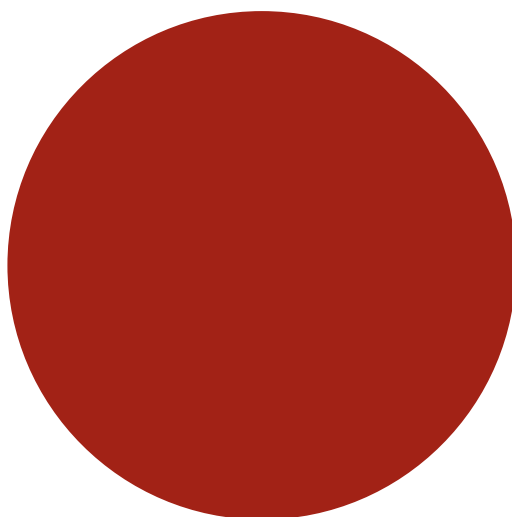
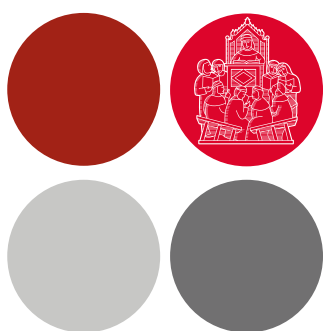


Seasonal School

Sant'Anna





Seasonal
School
Sant'Anna
2024/2025

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Benvenute/i alla Scuola Superiore Sant'Anna

Sono lieta di presentarvi le “**Seasonal School**” della Scuola Superiore Sant'Anna di Pisa destinate a brillanti studentesse e studenti universitari e dottorandi italiani e stranieri.

Fin dalla sua costituzione, la Scuola si è distinta per essere una **learning community** in cui docenti, allieve e allievi interagiscono ed affrontano tematiche di ricerca di frontiera con un approccio interdisciplinare. La missione della Scuola è, infatti, quella di essere una istituzione pubblica di riferimento e di qualità, dove il talento è messo in campo per prendersi cura del mondo e per contribuire con responsabilità alla sua crescita culturale e alla sua sostenibilità, nel rispetto dei valori costituzionali.

Con questa missione, ci rivolgiamo agli studenti e studentesse universitari italiani e stranieri di alto merito desiderosi di mettere in gioco il proprio talento partecipando ad una Seasonal School: un corso intensivo, di una o due settimane, a carattere residenziale o in modalità on line, dedicato a tematiche di frontiera interdisciplinari.

Mi auguro di potervi incontrare presto per accogliervi nella nostra comunità scientifica ricca di stimoli, in cui la ricerca diventa la palestra di apprendimento per la formazione.

Sabina Nuti
Rettrice

Welcome to Sant'Anna School

I am pleased to present to you the “**Seasonal Schools**” of the Scuola Superiore Sant'Anna of Pisa, designed for outstanding Italian and international undergraduate and PhD students.

Since its establishment, the School has distinguished as a **learning community** in which faculty and students closely interact to address frontier research topics with an interdisciplinary approach. The School's mission is indeed to be a high-quality public institution of reference, where talent is nurtured to take care of the world and to contribute with a strong sense of responsibility to its cultural growth and its sustainability, in line with our constitutional values.

With this mission in mind, we call on the gifted Italian and foreign students who are eager to bring their talent into play by participating in a Seasonal School: an intensive course, of one or two weeks, on-site or online, focused on interdisciplinary frontier research topics.

I hope I will soon have an opportunity to meet you and to welcome you into our lively scientific community, where research becomes the training ground for education.

Sabina Nuti
Rector



Rankings

Times Higher Education Young University Rankings 2024

1° posto a livello nazionale su 19 università censite

7° posto a livello europeo

13° posto a livello mondiale su 673 università censite

Times Higher Education Young University Ranking 2024

1st at the national level on a census of 19 institutions

7th at the european level

13th at the international level on a census of 673 institutions

Chi siamo

“A research university, a school of talent, for a more sustainable and inclusive world”

Questo è il motto della Scuola Superiore Sant’Anna, che si qualifica innanzitutto come una research university riconosciuta a livello internazionale per la qualità della ricerca condotta nei suoi Istituti e laboratori. La Scuola Superiore Sant’Anna è un istituto universitario pubblico a statuto speciale, che si propone di promuovere, a livello nazionale e internazionale, lo sviluppo della cultura e della ricerca scientifica e tecnologica nell’ambito delle Scienze Economiche e Manageriali, Scienze Giuridiche, Scienze Politiche, Scienze Agrarie e Biotecnologie vegetali, Scienze Mediche e Ingegneria Industriale e dell’Informazione. La Scuola ha da sempre l’obiettivo di sperimentare percorsi innovativi nella ricerca e nella formazione in un contesto interdisciplinare e di continuo scambio culturale e intellettuale tra docenti, allieve e allievi. Da qui nascono idee innovative, sviluppate in collaborazione con università, enti, aziende e istituti di ricerca stranieri. Grazie al suo carattere internazionale, alla formazione di eccellenza e alla comunità scientifica, la Scuola Superiore Sant’Anna vuole essere punto di riferimento in Italia e all’estero.

About us

“A research university, a school of talent, for a more sustainable and inclusive world”

This is the motto of the Sant’Anna School of Advanced Studies, which, first and foremost, qualifies itself as a research university, internationally renowned for the quality of the research carried out in its Institutes and laboratories. Sant’Anna School is a special-statute public university that aims to promote, on a national and international level, the development of culture and scientific and technological research in the fields of Economic and Managerial Sciences, Legal Sciences, Political Science, Agricultural sciences and Plant biotechnology, Medical Sciences and Industrial and Information Engineering. Since its foundation, Sant’Anna School has had the goal of experimenting innovative programs in research and training activities, with an interdisciplinary approach and in a context of continuous cultural and intellectual exchange between faculty and students. Innovative ideas are born and developed in this environment, in collaboration with foreign universities, institutions, companies and research centres. Sant’Anna School wants to grow its role as a point of reference in Italy and abroad, thanks to its international nature, its focus on excellence, and its active scientific community.



Ricerca di frontiera

Affrontare i problemi con un approccio interdisciplinare e condividere le conoscenze acquisite in ambiti diversi rappresenta la nuova sfida della ricerca.

Gli Istituti e i laboratori di ricerca della Scuola si aprono alle studentesse e agli studenti di talento per coinvolgerli nei loro progetti sulle tematiche di avanguardia per il progresso della scienza e della società.

Frontier Research

Addressing problems with an interdisciplinary approach and sharing acquired knowledge across different fields represents the new challenge in research.

The institutes and research laboratories of the Sant'Anna School open their doors to talented students, involving them in their cutting-edge projects aimed at advancing science and society.

Dove siamo

Pisa, città d'arte, di cultura e di scienza è un museo a cielo aperto famosa non solo per la bellissima Piazza dei Miracoli, patrimonio dell'UNESCO, ma anche per le sue istituzioni universitarie e di ricerca che costituiscono un centro d'eccellenza e di innovazione per la formazione e la ricerca tra i più avanzati del mondo. A Pisa hanno studiato illustri scienziati come Galileo Galilei, Enrico Fermi, Antonio Pacinotti, Carlo Rubbia e ospita tuttora talenti che danno vita ad un ambiente accademico vivace ed attivo che contribuisce ad arricchire l'esperienza universitaria delle studentesse e degli studenti che vi entrino in contatto. Strade e piazze popolate da turisti e studenti provenienti da ogni parte del mondo la rendono una città accogliente e stimolante anche per concludere una intensa giornata di studio.

Where we are

Pisa is a city of art, science and culture, an open-air museum that is not only famous for the beautiful "Piazza dei Miracoli", a UNESCO World Heritage Site, but also for its universities and research centres, which constitute a cluster of excellence and innovation in education and research among the most advanced in the world. Illustrious scientists such as Galileo Galilei, Enrico Fermi, Antonio Pacinotti, Carlo Rubbia studied in Pisa, and the city continues to hosts talents that create an active and lively academic environment, contributing to a richer university experience for all students who take part in it. Pisa's streets and squares, populated by tourists and students from all over the world, make it a welcoming and stimulating city to discover after an intense day of study!



Le Seasonal School

Cosa sono

Le **Seasonal School** sono percorsi formativi di eccellenza a carattere fortemente interdisciplinare, integrativi alla formazione universitaria e focalizzati sulle tematiche di ricerca di frontiera della Scuola. Questi programmi offrono agli studenti l'opportunità di approfondire argomenti avanzati e innovativi, contribuendo allo sviluppo delle loro competenze e alla crescita personale in un ambiente stimolante e aperto alle nuove sfide del sapere.

Come sono organizzate

Le Seasonal School hanno la durata di **una o due settimane**, si svolgono prevalentemente in **lingua inglese** e possono avere **carattere residenziale** oppure svolgersi con modalità di **didattica a distanza**. Al termine del percorso, successivamente al superamento di una prova finale, è previsto il rilascio di un attestato di partecipazione con il riconoscimento dei CFU indicati nei singoli bandi.

A chi si rivolgono

Sono destinate prioritariamente a studentesse e studenti universitari provenienti da corsi di Laurea triennale, magistrale e a ciclo unico, che abbiano le medesime caratteristiche di profitto degli studenti della Scuola. Per garantire un'interazione ottimale tra studenti e docenti, ogni Seasonal School offre un numero di posti limitato.

Requisiti di ammissione

Sono ammessi studentesse e studenti iscritti (o laureati da meno di 6 mesi al momento della domanda) ad un corso di Laurea triennale, Laurea a ciclo unico, Laurea Magistrale o Dottorato di università italiane o straniere che siano in corso e con una media di profitto pari almeno a 27/30 per il sistema italiano o almeno B per quello internazionale.

The Seasonal Schools

What the Seasonal Schools are

The **Seasonal Schools** are interdisciplinary training programs "of excellence" complementary to university education and focused on the frontier research topics of the Sant'Anna School. These programs offer students the opportunity to delve into advanced and innovative subjects, contributing to the development of their skills and their personal growth in a stimulating environment.

Organization and structure

The Seasonal Schools last **one or two weeks**, are conducted primarily in **English**, and can be either **residential** or held through **distance learning methods**. At the end of the program, after passing a final exam, participants receive a certificate of attendance with the ECTS credits specified in the Calls for application.

Target participants

They are primarily intended for undergraduate, master's, and single-cycle degree students who share the same level of academic performance of Sant'Anna School's honor students. To ensure optimal interaction between students and the faculty, each Seasonal School offers a limited number of places.

Admission requirements

Eligible applicants are students enrolled in (or who have graduated less than 6 months before the application) a Bachelor's, single-cycle, Master's degree, or Ph.D. program in Italian or foreign universities who are on track with their studies and have an average grade of at least 27/30 in the Italian system or B in the international system. Admission to the Seasonal Schools requires a self-certified knowledge of the language in which the course will be conducted, at an advanced level (B2) or higher.

L'accesso alle Seasonal School prevede il possesso della conoscenza autocertificata della lingua in cui si svolgerà il corso pari o superiore al livello B2.

Come si accede

Per ogni Seasonal School viene pubblicato un bando di concorso dove si trovano tutte le informazioni sulle modalità di partecipazione e sulla documentazione necessaria per inviare la candidatura. I bandi vengono pubblicati alla pagina:

www.santannapisa.it/it/seasonal-school

Costi

I costi e le modalità di pagamento sono indicati nei bandi delle singole Seasonal School. La quota di iscrizione include, oltre alla partecipazione alle lezioni, anche il materiale di studio, il vitto e l'alloggio nel caso di iniziative in presenza.

Agevolazioni e premi

In base al proprio ISEE universitario sono previste riduzioni della quota di iscrizione. Gli studenti e le studentesse delle università italiane e straniere convenzionate hanno diritto a posti riservati e a una riduzione del 10% sui costi di iscrizione. Ai partecipanti, fino ad un massimo di tre, che al termine del corso

How to apply

The Calls for each Seasonal School containing all the information about the application procedures and the required documentation to submit an application are published on the following page:

www.santannapisa.it/en/training/seasonal-schools

Costs

The costs and payment methods are indicated in the Calls of each Seasonal School. The registration fee includes study materials, meals, and accommodation in case of on-site courses.

Preferential rates and awards

Reductions in the registration fee are available according to the applicant's annual income. Students from Italian and foreign universities with specific agreements with Sant'Anna School are entitled to reserved spots and a 10% reduction in the enrolment costs. Participants who achieve the highest evaluation at the end of the course, up to a maximum of three, receive a prize of €450 funded by Il Talento all'Opera Onlus Foundation (www.santannapisa.it/en/university/talento-allopera-foundation), as specified in the Calls.



conseguono la valutazione migliore, viene erogato un premio al merito pari a 450 euro finanziato dalla Fondazione Talento all'Opera Onlus (<https://www.santannapisa.it/it/ateneo/fondazione-il-talento-allopera-onlus>) sulla base di quanto specificato nei bandi.

Campus

Le Seasonal School rappresentano un'opportunità unica per entrare in contatto con studentesse e studenti di merito provenienti da tutta Italia e dall'estero, vivendo appieno le strutture della Scuola Sant'Anna. Uno dei valori fondanti della Scuola Sant'Anna, infatti, è la residenzialità, che si traduce in spazi comunitari di coabitazione e aggregazione, grazie all'organizzazione secondo il modello del campus universitario. Tra questi spazi si trovano una fornita biblioteca, aule studio, laboratori di ricerca, una mensa e aree ricreative comuni. Gli studenti e le studentesse delle Seasonal School sono alloggiati, secondo disponibilità, nelle strutture collegiali della Scuola oppure in alberghi convenzionati situati nelle immediate vicinanze. Questo consente ai partecipanti di godere appieno della città di Pisa e del suo centro storico, integrando l'esperienza formativa con un'immersione nella vita culturale della città.

Campus

The Seasonal Schools represent a unique opportunity to interact with talented students from all over the world while fully experiencing the facilities of Sant'Anna School. One of the core values of Sant'Anna School is the "Campus life", which translates into shared living and gathering spaces organized in the university college model. These spaces include a well-stocked library, study rooms, research laboratories, a cafeteria and common recreational areas. Participants of the Seasonal Schools are accommodated, subject to availability, in the residential facilities of the Sant'Anna School or in affiliated hotels located nearby. This allows participants to fully enjoy the city of Pisa and its historic center, enriching their educational experience with an immersion in the city's cultural life.

More info at



Some data on the Seasonal Schools from the triennium 2020-23



46

Activated courses



477

Participants



26,1

Average age

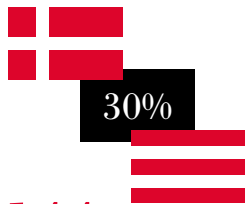


218

female

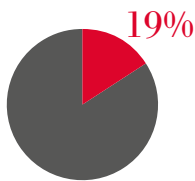
259

male



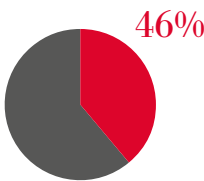
144

International students



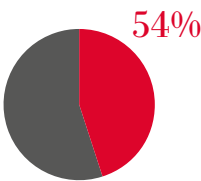
77

Bachelor's degree



184

Master's degree



216

Phd



9,4 out of 10

Average rating of the Seasonal Schools by the participants

Le istituzioni partner

Forte della sua esperienza, la Scuola Superiore Sant'Anna si propone quale soggetto facilitatore e di coordinamento per la costituzione di una rete del talento attraverso la collaborazione con università italiane e straniere e altri soggetti istituzionali interessati ad offrire ai propri studenti e studentesse di merito una formazione integrativa sulle tematiche di ricerca più avanzate.

Al momento hanno aderito al progetto le seguenti università ed enti: **Università di Catania, Università della Tuscia, Università di Trento, Fondazione Onaosi, Università di Messina, Università di Camerino, Università della Calabria, Università di Palermo, Università della Valle d'Aosta, Libera Università di Bolzano, Università Politecnica delle Marche, Università di Siena, Scuola Galileiana di Studi Superiori, Università di Pisa e Università di Firenze.**

Alle università convenzionate è riservato almeno un posto per ogni corso in programma oltre alla riduzione del 10% delle spese di iscrizione a tutti gli studenti e le studentesse, nel rispetto dei criteri di selezione previsti dal bando di ammissione. Per partecipanti iscritti all'Università di Pisa che non necessitino di alloggio la riduzione applicata è del 40%.

Nel triennio 2020-23 sono stati ammessi alle Seasonal School 96 studentesse e studenti provenienti da università partner, ovvero il 20% dei partecipanti totali.

Il network delle collaborazioni è in costante evoluzione, le università interessate ad aderire al progetto possono contattarci per avere maggiori dettagli e informazioni: seasonalschools@santannapisa.it Tel. +39 050 883204/3275

Partner institutions

Drawing on its extensive experience, Sant'Anna School aims to act as a facilitating entity for establishing a talent network through collaboration with universities and other institutions interested in providing high-achieving students with advanced supplementary training.

Currently, the following universities and institutions have joined the Seasonal School project: **University of Catania, University of Tuscia, University of Trento, Onaosi Foundation, University of Messina, University of Camerino, University of Calabria, University of Palermo, University of Aosta Valley, Free University of Bozen-Bolzano, Marche Polytechnic University, University of Siena, Galilean School of Higher Education, University of Pisa and University of Florence.**

Students enrolled in affiliated universities are reserved at least one spot for each scheduled course, along with a 10% reduction in registration fees, in accordance with the selection criteria outlined in the admission Calls. For participants enrolled at the University of Pisa who do not require accommodation, the reduction applied is 40%.

From 2020 to 2023, 96 students from partner universities were admitted to the Seasonal Schools, constituting 20% of the total participants.

The network of collaborations is continuously evolving and universities interested in joining the project can contact us for more details and information at: seasonalschools@santannapisa.it Tel. +39 050 883204/3275

I collegi di merito

Il Protocollo d'intesa sottoscritto nel gennaio 2021 tra la Scuola Superiore Sant'Anna e la Conferenza dei Collegi Universitari di Merito prevede l'attivazione di una collaborazione strutturata tra le due istituzioni, aprendo la partecipazione alle Seasonal School a studentesse e a studenti dei 52 Collegi Universitari di Merito aderenti alla Conferenza con una tariffa agevolata del 10%. Rispettati i criteri di selezione previsti dal bando di ammissione, la Scuola riserva almeno un posto per ogni corso ad una studentessa o studente proveniente da un collegio membro della Conferenza.

Colleges of Merit

The Memorandum of Understanding signed in January 2021 between Sant'Anna School of Advanced Studies and the Conference of Colleges of Merit (CCUM) envisages the establishment of a structured collaboration between the two institutions, allowing students from the 52 members to participate in the Seasonal Schools at a discounted rate of 10%. Subject to the selection criteria specified in the admission Calls, Sant'Anna School reserves at least one spot per course for a student from a member college of the Conference.



L'Alleanza Universitaria Europea EELISA **EELISA, European Engineering Learning Innovation and Science Alliance**, è una alleanza universitaria del programma European Universities a cui partecipa la Scuola Superiore Sant'Anna, che riunisce dieci istituzioni universitarie europee, **Universidad Politécnica de Madrid, Budapesti Műszaki és Gazdaságtudományi Egyetem, École Nationale des Ponts et Chaussées, Friedrich-Alexander Universität Erlangen-Nürnberg, İstanbul Teknik Üniversitesi, Scuola Normale Superiore, Universitatea Politehnica din București, Université Paris Sciences et Lettres, Zürcher Hochschule für Angewandte Wissenschaften**. L'obiettivo di EELISA è di definire e implementare un modello condiviso di ingegnere europeo radicato nella società contemporanea. Dal 2020 il progetto EELISA si è rivelato di estrema importanza per la promozione a livello internazionale delle Seasonal School della Scuola. Nel triennio

European University Alliance EELISA **EELISA, the European Engineering Learning Innovation and Science Alliance**, is a European University Alliance under the European Universities initiative, which includes Sant'Anna School of Advanced Studies. It brings together ten European universities: **Universidad Politécnica de Madrid, Budapest University of Technology and Economics, École Nationale des Ponts et Chaussées, Friedrich-Alexander University Erlangen-Nürnberg, İstanbul Technical University, Scuola Normale Superiore, Politehnica University of Bucharest, Université Paris Sciences et Lettres and Zurich University of Applied Sciences**. The aim of EELISA is to define and implement a shared model of the European engineer deeply rooted in contemporary society. Since 2020, the EELISA project has been crucial in promoting Sant'Anna's Seasonal Schools internationally. From 2020 to 2023,

2020-23 sono stati ammessi alle Seasonal School 33 studentesse e studenti provenienti da università del network (il 7% dei partecipanti totali), a fronte di un ben maggiore numero di application inviate. Sono previste agevolazioni rispetto al pagamento della quota d'iscrizione per le studentesse e gli studenti delle università EELISA. Sempre per iniziativa del network sono in via di definizione le modalità di assegnazione di "EELISA micro-credentials" ai partecipanti alle Seasonal School, una certificazione di competenze e di abilità acquisite in uno specifico ambito, in aggiunta agli ECTS.

33 students from network universities (7% of total participants) were admitted to the Seasonal Schools, despite a higher number of applications received. Discounts on registration fees are provided for students from EELISA universities.

Additionally, the network is in the process of defining the allocation methods for "EELISA micro-credentials" for Seasonal School participants, which certify specific skills and competencies acquired in addition to ECTS credits.

Formazione e mobilità sociale

Education and social mobility

Il modello delle Seasonal School promosso dalla Scuola Superiore Sant'Anna rappresenta un esempio riconosciuto di come le istituzioni universitarie possano contribuire alla promozione del merito e della mobilità sociale. Attraverso l'adozione di politiche inclusive che considerano l'ISEE dei partecipanti, la Scuola Sant'Anna garantisce, infatti, l'accesso a programmi formativi di eccellenza a giovani talentuosi, indipendentemente dalle loro condizioni socio-economiche e culturali di partenza. L'investimento significativo di 155.500 € nel primo triennio (2020-23) per ridurre le quote di iscrizione per il 70% degli aventi diritto (269 partecipanti) è una chiara dimostrazione dell'impegno della Scuola nel supportare la crescita e lo sviluppo dei suoi studenti. Questa iniziativa non solo favorisce l'uguaglianza delle opportunità, ma contribuisce anche a creare un ambiente educativo più inclusivo, interattivo e capace di affrontare le sfide contemporanee.

The Seasonal School model promoted by Sant'Anna School of Advanced Studies represents a recognized example of how universities can contribute to the promotion of meritocracy and social mobility. Through the adoption of inclusive policies that take into account participants' economic conditions, Sant'Anna School ensures access to excellent educational programs for talented young students, regardless of their socio-economic and cultural backgrounds. The significant investment of €155.500 in the first triennium (2020-23) to reduce registration fees for 70% of eligible participants (269 students) is a clear demonstration of the School's commitment to support accessible education. This initiative not only promotes equal opportunities but also contributes to creating a more inclusive and interactive environment capable of addressing contemporary challenges.

I premi al merito per valorizzare il talento

Merit awards

La Fondazione Il Talento all'Opera Onlus nasce nel 2020 dalla volontà di un gruppo di imprenditori che, insieme alla Scuola Superiore Sant'Anna, intende realizzare una convergenza di risorse pubbliche e private a sostegno del talento e del merito. La Fondazione realizza la propria missione attraverso progetti ad alto impatto sociale che riguardano la formazione, la ricerca universitaria e la terza missione universitaria.

Nell'ambito delle Seasonal School la Fondazione Il Talento all'Opera Onlus ha trovato in EY Foundation Onlus un importante partner, fin dalla sua prima edizione, per poter promuovere il Premio al Merito, una premialità di 450 euro assegnata ai migliori classificati di ciascun corso, fino a un massimo di tre, sulla base della valutazione finale ottenuta.

Nel primo triennio (2020-23) sono state assegnate premialità a 136 studentesse e studenti per un investimento totale a sostegno del merito pari a 61.200 €.

Il Talento all'Opera Foundation Onlus was established in 2020 by a group of entrepreneurs who, in collaboration with Sant'Anna School of Advanced Studies, aim to harness public and private resources to support talent and merit. The Foundation fulfills its mission through high-impact social projects focusing on education, university research and the university's third mission. Within the framework of the Seasonal Schools, Il Talento all'Opera Foundation Onlus has found an important partner in EY Foundation Onlus since its inception, to promote the Merit Award, a prize of €450 assigned to the top performers of each course, up to a maximum of three, based on their final evaluation.

In the first triennium (2020-23), merit awards were granted to 136 students, totaling an investment of €61.200 to support merit.



Dicono di noi

About us

I partecipanti del primo triennio (2020-23) hanno espresso una valutazione estremamente positiva sull'esperienza generale delle Seasonal School, con una valutazione media di 9,4 su una scala da 1 a 10, dove 10 indica il massimo. Di seguito, alcune testimonianze:

"L'esperienza della Seasonal School è stata per me una preziosa occasione di apprendimento. È sicuramente stata di grande valore la possibilità di confronto sia con un corpo docente preparato e disponibile, sia con l'esperienza e il differente background di ciascuno degli altri studenti, che hanno permesso di arricchire le discussioni con molteplici punti di vista. È quindi un'esperienza che suggerisco, indipendentemente dal livello di partenza, a chiunque sia interessato a mettersi in gioco per ampliare le proprie conoscenze tramite l'incontro sfidante con professionalità e realtà diverse."

Partecipante ad una Seasonal School nel 2021

"La Seasonal School che ho frequentato è stata per me un'esperienza di crescita a livello accademico e personale. Ho avuto l'opportunità di studiare in un ambiente dinamico e stimolante, caratterizzato dal continuo confronto con colleghi straordinari e docenti competenti e disponibili. Le cose più importanti che questo corso mi ha trasmesso sono l'approccio critico allo studio, il rifuggire le risposte semplici a tematiche complesse e il desiderio di imparare sempre di più. Il mio ringraziamento alla Scuola Superiore Sant'Anna per l'occasione concessami e per la sua attività di promozione del merito fatta di azioni concrete e tangibili."

Partecipante ad una Seasonal School nel 2022

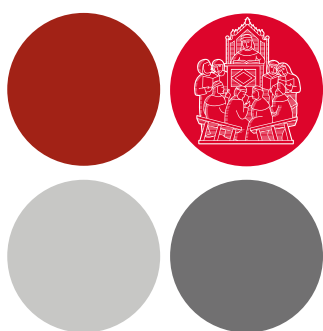
Participants in the first triennium (2020-23) expressed extremely positive feedback about their overall experience at the Seasonal Schools, with an average rating of 9.4 out of 10. Below are some testimonials:

"The Seasonal School experience was a valuable learning opportunity for me. The possibility to engage with both knowledgeable and supportive faculty, as well as the diverse experiences and backgrounds of fellow students, enriched discussions with multiple perspectives. I highly recommend this experience to anyone interested in challenging themselves to expand their knowledge through engaging encounters with diverse professionals and realities."

Participant in a Seasonal School in 2021

"The Seasonal School I attended was a significant growth experience for me academically and personally. I had the opportunity to study in a dynamic and stimulating environment, characterized by continuous interaction with extraordinary colleagues and competent, supportive instructors. The most important lessons this course imparted to me are a critical approach to study, avoiding simplistic answers to complex issues, and a desire for continuous learning. My gratitude to Sant'Anna School of Advanced Studies for the opportunity provided and for their concrete and tangible efforts in promoting merit."

Participant in a Seasonal School in 2022



Seasonal
School
Sant'Anna
Program
2024/2025

Exploring sea and space: technologies, opportunities and challenges

 **English**  **On site**

 **Period**

September 16th-20th, 2024

 **Deadline for Registration**

July 28th, 2024



Learning objectives

In the last centuries, humanity has fully explored and mapped the emerged fraction of Earth surface; today it has growing interest in exploring and exploiting the submerged fraction of the Earth as well as the nearby space regions, intensively. To this aim, engineers provide new powerful means (robots, underwater and space communication systems, new nano-satellite solutions); the exploration and exploitation of resources also pose problems relating to the biology of living beings. Moreover, a wide range of new issues arise, about the economic implications and legal implications. The School aims to provide a concise overview of the relevant scientific challenges and development prospects in a unitary framework where issues of economic and environmental impact, potential conflicts and regulatory assessments are also addressed. The Seasonal School will take an holistic approach and will introduce participants to the key technologies in a unitary framework, where the engineering role is viewed together with biological and medical issues, economic aspects and legal problems. At the end of the Seasonal School, the participants will have a comprehensive overview of the future trends in the challenging topics of space and sea exploration.

Teaching methodologies

Students will find a cross-disciplinary learning environment, interacting with professors and industrial managers that are leaders in their research areas. They will also be given the opportunity to visit the labs of Scuola

Superiore Sant'Anna and experience latest research approaches.

Target participants

Advanced Undergraduate, postgraduate and PhD students from engineering or physics.

Coordinator and key teaching staff

Coordinator: Ernesto Ciaramella

Key teaching staff: Debora Angeloni, Emanuele Sommario, Giulio Cossu, Giuseppe Turchetti, Francesco Strazzari, Vincenzo Lionetti, Marcello Calisti

More info [here](#)



CROSSROADS - THE EU UNDER SIEGE.

Politics, Law and Institutional Reform After the 2024 elections

 **English**  **On site**

 **Period**

September 30th-October 4th, 2024

 **Deadline for Registration**

September 1st, 2024



Learning objectives

The CROSSROADS Seasonal School aims to provide participants with the tools to understand how the European Union has changed since the June 2024 elections and the election of a new European Parliament and European Commission. Specifically, it aims to investigate the policy challenges to which the new European institutions will be called upon to respond – will the objectives of the European Green Deal be confirmed? Will the new EU always stand by Ukraine? How will it deal with illiberal democracies? At the same time, it will focus on major institutional changes. What are the new political equilibria in the new European Parliament, and what effects are they likely to produce? How has the new Commission been chosen, and what about developments in the institutional framework? Finally, the Italian case will be investigated. What is the impact of the new EU institutional set-up on the government in Rome?

By the end of the School, students will be able to:

1. Critically analyse the key developments in European Politics after the European Parliament elections (6-9 June 2024) and their impact at the national and supranational levels;
2. Develop methodological skills – across different disciplines, perspectives and approaches – to assess the complexity of the crisis;
3. Gain advanced knowledge of EU politics and law and acquire transferable skills to work in the EU institutions, think-tanks, interest groups, and in academia.

Teaching methodologies

S Students will be exposed to a problem-based and research-led teaching methodology and will be asked to actively contribute to the programme. Classes will be interactive and mix frontal teaching with case-studies, simulations, group discussions and presentations. Practitioners and policy experts will participate to the program presenting their experience.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (for instance, but not exclusively, law, political science, economics, management, languages, history, philosophy) with a strong interest on EU law and politics.

Coordinator and key teaching staff

Coordinators: Edoardo Bressanelli, Giuseppe Martinico, David Natali

Key teaching staff: Francesca Biondi, Anna Loretoni, Edoardo Chiti, Giacomo Delledonne

More info [here](#)



MEDSKILL

Development of MEDical SKILLs by Simulation

 **English**  **On site**

 **Period**

October 7th-11th, 2024

 **Deadline for Registration**

September 3rd, 2024



Learning objectives

As of today, the need for practical skills and problem-solving capabilities remains largely unmet in many medical school curricula across Europe. Medical school education, in fact, remains largely anchored to a traditional paradigm of learning a discrete amount of information about pathophysiology principles and illnesses' descriptions, without worrying about developing the skills necessary to work confidently "on the patient". Digital tools based on macro-and microsimulation, thanks to their flexibility, effectiveness, accuracy and accessibility may give a fundamental contribution in solving this issue, and we want to apply their potential in undergraduate medical students' education. The MEDSKILL school will allow students to: a) get in touch with digital tools that facilitate the study of anatomy, physiology, pathophysiology and clinical reasoning; 2) confront virtual patients/mannequins, interpret their artificial symptoms / signs and make decisions, taking into account the appropriateness of the choice, as well as ethical correlates and sustainability; 3) mimic clinical situations to test patient communication skills, simulate the use of diagnostic equipment, team leaders and interventional therapies

Teaching methodologies

The MEDSKILLS initiative will deliver both lectures and hands-on lab sessions. Each practical session is preceded by an introductory lesson on the theoretical aspects of the maneuvers that will be carried out and followed by a debriefing session. The course aims to provide preparation on transthoracic and abdominal ultrasound

methods and the main cardiovascular and abdominal diseases. The course is divided into formal theoretical lessons and practical internships in the Simulabo classroom with the use of the Vimedix ultrasound and advanced echocardiography simulator.

Target participants

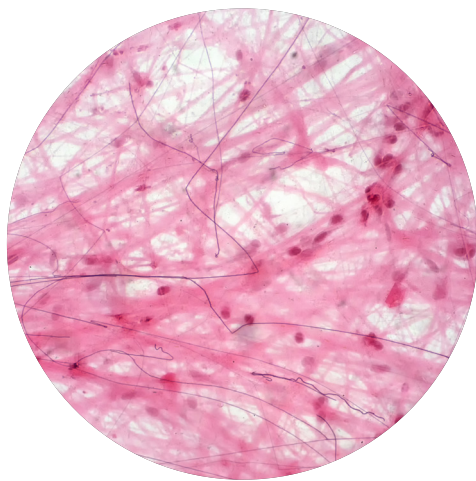
Undergraduate medical students (IV-VII academic year), postgraduate M.D.s candidacies can be evaluated.

Coordinator and key teaching staff

Coordinators: Claudio Passino, Alberto Giannoni

Key teaching staff: Michele Emdin, Giuseppe Vergaro, Alberto Aimo, Francesco Sbrana, Marco Ciardetti, Angelo Monteleone, Gianluca Mirizzi, Claudia Taddei, Elisa Poggianti

More info [here](#)



 **English**  **On site**

 **Period**

October 14th-18th, 2024

 **Deadline for Registration**

September 8th, 2024



Learning objectives

The main target of the CESM seasonal school is represented by students from different backgrounds interested in the field of efficient resource management and circular economy. The CESM course explores organizational aspects and innovation facets related to all phases of the product life cycle; moreover, it provides practical overview of how processes, decisions and business models should change in light of the new circular economy paradigm. In more detail, the CESM seasonal school consists of 9 training modules lasting half day each on issues such as: circular design, strategy development & business models, communication. Finally, a half-day laboratory is scheduled to apply what students have learned in all previous lessons. Therefore, the learning objectives of CESM encompass: helping participants to acquire a framework of useful skills to seize the opportunities in the economic shift; managing the challenges and transformation processes in a circular logic in order to encourage the practical application of the knowledge gained.

Teaching methodologies

Students will be interactively and proactively engaged in the training process thanks to the integration of the theoretical concepts with the practical experience under the guidance of the trainers, encompassing both academics and practitioners. The use of experiential techniques and the articulation of training and laboratories will allow the participants to consolidate existing skills and increase self-awareness. The innovative teaching methods will also rely extensively on

companies' experiences in order to provide real world examples and lessons learnt. Case studies will also be included amongst the teaching tools on the purpose of encouraging the practical application of theoretical concepts, thus bridging the gap between theory and practice.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. management, economics, law, political science, engineering, life sciences) who are interested in understanding how to manage the transition process towards the circular economy paradigm.

Coordinator and key teaching staff

Coordinator: Marco Frey

Key teaching staff: Fabio Iraldo, Francesco Testa, Eleonora Annunziata, Tiberio Daddi, Maria Rosa De Giacomo; Nora Annesi, Filippo Corsini

More info [here](#)



WAT-CHANGE

Water-related ecosystem services for adapting societies to climate change

 **English**  **On site**

 **Period**

October 21st-25th, 2024

 **Deadline for Registration**

September 8th, 2024



Learning objectives

While climate change is posing at risk traditional water resources management, there is the urgent need to devise low-energy and low-impact solutions to adapt the environment, societies and economies to this threat.

The WAT-CHANGE Seasonal School aims at introducing the participants to the new growing area of solutions provided by water-related ecosystem services.

In particular, we will deal with nature-based solutions for water supply, treatment of polluted water, and flood risk mitigation such as managed aquifer recharge, river restoration, constructed wetlands, sustainable drainage systems, and remediation of contaminated sites using phytoremediation techniques.

At the end of the course the students will have acquired the knowledge and skills that will allow them to understand impact and functions of the main nature-based solutions for solving the most common water resources management problems and start their design.

Teaching methodologies

The course is based on 20 hours of interactive and cross-disciplinary learning from academia and professional world along with 8 hours of laboratory exercises or with the aid of PCs and free and open source software. A field trip will take place to visit the ecohydrological infrastructures of the Val di Cornia area. This area has recently been recognized by UNESCO's International Hydrology Program as a site of global importance for ecohydrology.

A final 4-hour workshop will bring participants in contact with Italian companies involved in the design and management of nature-based solutions and with regulatory bodies, in order to deepen the knowledge of the regulatory framework.

Target participants

Undergraduate, postgraduate and PhD students with scientific and engineering backgrounds (e.g. earth and environmental sciences and engineering, civil engineering, natural sciences, agricultural engineering, biological sciences) interested in understanding the agri-food systems governance. Participation of students from social or economic background is also welcome.

Coordinator and key teaching staff

Coordinator: Rudy Rossetto

Key teaching staff: Laura Ercoli, Alessandra Francini, Luca Sebastiani

More info [here](#)



 **English**  **On site**

 **Period**

January 27th-31st, 2025

 **Deadline for Registration**

December 1st, 2024



Learning objectives

The protection of biodiversity presents a worldwide challenge, with the EU striving to take the lead in addressing its decline through its 2030 Biodiversity Strategy.

Businesses are pivotal in crafting a framework that preserves and restores biodiversity along with the ecosystem services it offers. The Seasonal School is committed to addressing the global imperative of biodiversity conservation and advocating for a regenerative economic development approach.

The objectives of the Seasonal School are as follows: (1) examine and promote a development model capable of protecting and regenerating biodiversity and the services that ecosystems provide, from a perspective of regenerative economic development; (2) provide participants with stimuli and tools to understand and measure the impact of business on biodiversity, evaluate risks and opportunities; and (3) foster technological and organizational innovation, encouraging the development of new technological and organizational solutions that foster a regenerative economy that protects natural capital. The Seasonal School is affiliated with the National Biodiversity Future Center (NBFC), an Italian project funded by the European Union's NextGenerationEU initiative.

Teaching methodologies

The Seasonal School includes lessons with active participation from students, case studies discussion, laboratory activity in-person testimonies from entrepreneurs, managers and experts in the field of

biodiversity, company visits to parks/ organizations that contribute to biodiversity protection, and guided group work aimed at promoting discussion among students from different disciplines on the contents learned during the Seasonal School.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. management, biology, law, political science, life sciences and engineering) who are interested in acquiring knowledge, skills, and experiences in the broad field of biodiversity and business.

Coordinator and key teaching staff

Coordinator: Valentina Cucino

Key teaching staff: Andrea Piccaluga, Alberto Di Minin, Lino Cinquini, Andrea Tenucci, Giacomo Pigatto, Francesco Testa, Sara Tessitore, Cesare Stefanini, Donato Romano, Laura Ercoli, Anna Camilla Moonen

More info [here](#)



 **Italiano**  **On site**

 **Period**

February 3rd-7th, 2025

 **Deadline for Registration**

December 1st, 2024



Learning objectives

The Seasonal School will introduce participants to the urgent topic of food sustainability, exploring how to build sustainable and climate-resilient agri-food systems through a dialogue between social and life sciences. Regulatory and non-regulatory measures for socially inclusive and environmentally more efficient food systems will be addressed. The policy and legal implications of a transformative approach to shift towards more sustainable solutions in a holistic perspective will be thoroughly analysed during the Seasonal School. Topics such as food security and the right to food, food safety, international trade, digital innovation and blockchain will be at a centre stage. Moreover, issues linked to farming and consumption models will be taken into consideration through seminars given by scholars from the life science Institute.

Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment that facilitate problem solving as well as strong decision-making, strategic communication, and leadership. Interdisciplinary will characterize both the teaching staff (including professors of law, economics, management, agronomy, medicine) and the participants. Cross-fertilization among disciplines is in fact the most effective way for designing more sustainable food systems.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. law, political science, life sciences

and engineering) who are interested in understanding the agri-food systems governance.

Coordinator and key teaching staff

Coordinators: Eloisa Cristiani e Mariagrazia Alabrese

Key teaching staff: Francesca Capone, Stefano Carlesi, Camilla Moonen, Vincenzo Lionetti, Andrea Saba

More info [here](#)



DS Inno

Data Science driven INNOvation in business and society

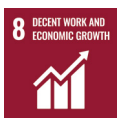
 **English**  **On site**

 **Period**

February 10th-14th, 2025

 **Deadline for Registration**

December 8th, 2024



Learning objectives

Due to technological advancements, increasing digitization, and the development of social media, as well as the widespread use of mobile devices with sensors and apps, the phenomenon of big data is becoming crucial not only for businesses but also for many sectors and society as a whole. Consequently, acquiring specific skills to effectively leverage the abundance of data in business innovation environments is particularly important.

Although the importance of this topic in the global economy is becoming clear, the university educational offerings in the fields of innovation management and data science are still limited. To address these aspects comprehensively, it is necessary to develop skills with an interdisciplinary approach, involving scholars in management, economics, as well as computer scientists and statisticians.

This Seasonal School aims to examine the relationship between innovation management and data science through a multi-level approach. First, this relationship will be explored at the company level through not only theoretical knowledge but especially through firsthand testimonials and site visits to large and small enterprises. Second, this relationship will be addressed at the sector level (e.g., healthcare and pharmaceuticals) and finally at the social level by presenting some direct experiences of computer scientists. To conclude, participants will also be provided with stimuli and tools of data science to understand and measure the complexity of this relationship.

Teaching methodologies

Students will be interactively and proactively engaged in the training process thanks to the integration of the theoretical concepts with the practical experience under the guidance of the trainers, encompassing both academics and practitioners.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. management, economics, law, political science, engineering, life sciences).

Coordinator and key teaching staff

Coordinator: Giulio Ferrigno

Key teaching staff: Andrea Piccaluga, Alberto Di Minin, Saverio Barabuffi, Enrico Marazzan, Francesca Chiaromonte, Chiara Seghieri, Andrea Vandin, Laura Magazzini, Valentina Lorenzoni, Riccardo Guidotti, Anna Monreale, Roberto Trasarti, Michela Natilli, Valerio Grossi

More info [here](#)



The Ethics of Climate Change: Reshaping Responsibilities for Present and Future Generations

🗨️ **English** 📍 **On site**

📅 **Period**

February 24th-28th, 2025

✍️ **Deadline for Registration**

December 8th, 2024



Learning objectives

The seasonal school aims to train participants on the ethics of climate change through a triple perspective: individual, global and intergenerational. It will also do so by opening up to disciplines beyond political and moral philosophy, such as political science, metaphysics, sociology and economics. The overall objective is to provide participants with the normative keys to analyse climate mitigation policies in the light of criteria such as historical responsibility, global asymmetries of economic power and adaptive capacity, and duties of justice towards future generations. The issue of social acceptability and socio-economic consequences will also be taken into account through the contribution of sociologists and social scientists. This will be preceded by an opening day with hard scientists dedicated to the introduction to climate change and the discussion of possible future risk scenarios.

Teaching methodologies

The seasonal school includes interactive face-to-face lectures led by pairs of lecturers, climate policy-making simulations and interdisciplinary workshops (also open to personalities from the world of communication, business and European institutions).

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. philosophy, law, political science, life sciences, engineering, economics, management, communication, development studies) who are interested in understanding

risks, solutions and opportunities of climate change mitigation.

Coordinator and key teaching staff

Coordinator: Alberto Pirri

Key teaching staff: Barbara Henry, David Natali, Edoardo Chiti, Francesca Capone, Giuseppe Martinico, Roberto Buizza

More info [here](#)



INNO-GOOD

Management of Innovation and Common Good

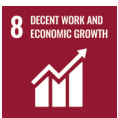
 **English**  **On site**

 **Period**

March 3rd-7th, 2025

 **Deadline for Registration**

January 19th, 2025



Learning objectives

This Seasonal School addresses a very important topic with a strong interdisciplinary approach, involving especially innovation management, but also sustainability and health management. The specific approach of this Seasonal School (1) aims at arousing the interest of participants from different scientific disciplines and with different professional objectives and (2) focuses on the goal of contributing to the common good (at the level of universities, companies, institutions and territories).

The theories and tools for managing innovation in organizations will be presented and discussed not so much with the objective of creating competitive advantage, but as a support to the ability to launch new initiatives of various kinds aimed at creating value for the society as a whole, especially in coherence with the need to rethink the current capitalist system. Emphasis will be given to the role of purpose-driven organizations, their capacity to trigger innovation solutions that address societal problems, as well as on the emergence of new ways of interacting with social, environmental and cultural contexts. In this regard, some paradigms that are today at the center of the debate on the transformation of the economy which is urgently needed will be presented, such as those of the creation of shared value, open innovation and civil economy.

Teaching methodologies

The Seasonal School will include lectures by professors, company visits, as well as presentations and seminars by people

active in different types of profit and non-profit initiatives aimed at contributing to the common good. Students will be also asked to contribute not only with questions but also with short presentations about specific issues as well as their personal experiences. The School will also be characterized by intense “out of the classroom” activities, during which participants and professors will have the opportunity to better know each other.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (economics, management, political sciences, philosophy).

Coordinator and key teaching staff

Coordinator: Andrea Piccaluga

Key teaching staff: Gianluca Gionfriddo, Francesco Testa, Natalia Gusmerotti, Sara Barsanti, Valentina Cucino, Martina Tafuro

More info [here](#)



InnovACtion in Health care: strategy, performance and data management

🇬🇧 **English** 📍 **On site**

📅 **Period**

March 10th-14th, 2025

✍️ **Deadline for Registration**

January 19th, 2025



Learning objectives

The Seasonal School beckons to passionate students eager to delve into the intricate realm of healthcare systems from a unique three-dimensional perspective: organization, stakeholders, and innovative managerial strategies. Our goal is to empower the healthcare system, propelling it towards greater quality, equity, and sustainability. Dive into a program centered on the dynamic management and innovation of the healthcare sector, offering a hands-on approach through the analysis and interpretation of quantitative data. Picture yourself immersed in captivating case studies and simulations, unraveling the complexities of the healthcare landscape.

This course doesn't just explore cutting-edge topics in the information and data era - it's a journey into the innovative and transformative power of data and managerial practices in the healthcare sector. As we navigate the societal shifts brought about by the pandemic, we dissect the innovation of settings, care pathways, and the resilience of healthcare and social healthcare services. We also delve into the fascinating realm of behavioral economics, providing a holistic view of the evolving healthcare landscape.

Teaching methodologies

With IACH, students will find an immersive, interactive, and inter-disciplinary learning environment with our cutting-edge methodologies that bring education to life! Collaborative and participative techniques will turn students into active participants, seamlessly blending theoretical concepts with hands-on experiences. The journey

involves constant interaction with real-world communities, ensuring a dynamic and engaging learning process.

Diving into experiential techniques, action-reflection phases, and workshops, participants will be not only solidified in terms of knowledge but will also enhance self-awareness and ignite a genuine passion for the topics explored.

Target participants

IACH is primarily aimed at Undergraduate, postgraduate and PhD students from different backgrounds, particularly Economics and Management, Political Science, Management Engineering, as well as students from the Life Science area (Medicine, Health Professions or equivalent).

Coordinator and key teaching staff

Coordinator: Sabina De Rosi

Key teaching staff: Sabina Nuti, Milena Vainieri, David Natali, Nicola Belle, Chiara Seghieri, Francesca Pennucci

More info [here](#)



INSIDER

Innovazioni nel Sistema della Rappresentanza

 **Italiano**  **On site**

 **Period**

March 17th-21st, 2025

 **Deadline for Registration**

January 26th, 2025



are interested in the course topics (e.g., law, political science, social sciences, sociology, philosophy, etc.).

Coordinator and key teaching staff

Coordinators: Emanuele Rossi, Valerio Di Porto, Fabio Pacini

Key teaching staff: Francesca Biondi, Luca Gori, Elena Vivaldi

More info [here](#)

Learning objectives

The seasonal school offers a selective study program open to motivated undergraduate and PhD students, giving them the opportunity to obtain a specific training on the main current issues concerning political representation, electoral and parliamentary law in a comparative and interdisciplinary perspective that includes law, political science, political philosophy, economy as well as the contribution of other fields (e.g., ICTs).

It is a kind of training that no ordinary university course is able to provide, in particular due to the presence of speakers with different background and expertise.

The students will therefore acquire skills that will allow them to critically consider from different points of view the various paradigm changes in political representation.

Teaching methodologies

The course will be conducted by lecturers of different backgrounds, thus enabling participants to look at the subject matter from an interdisciplinary perspective. The course will be articulated in lectures, working groups, case studies as well as meetings with experts. Unless otherwise indicated, the lessons will be held in Italian. An advanced knowledge of the Italian language is therefore required.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds who



EUProspect

The Making of a New Europe

 **English**  **On site**

 **Period**

March 24th-28th, 2025

 **Deadline for Registration**

January 26th, 2025



Learning objectives

The EUProspect Seasonal School offers a prospective and multidimensional view on the changing features of the European Union and new directions of the European integration process. It does so by focusing on three main projects elaborated by the European actors:

i) the reform of the economic governance;
ii) the strengthening of military security envisaged by the Strategic Compass for Security and Defence; and iii) the implementation of the ambitious strategy for climate neutrality laid down by the Green Deal. The purpose is to critically discuss each of these ongoing developments, their multiple relationships, the ways in which they reshape the mission and rationale of the EU. The structure of the course is a mixture of lectures and seminars. The intended learning outcome is a critical understanding of the ongoing institutional processes, the interpretation of their internal dynamics and interactions, an assessment of their rationale and implications.

Teaching methodologies

The teaching method aims at fostering critical thinking, posing thought-provoking questions and promoting a shared dialogue between all participants. In line with such Socratic method, the lectures will interactively discuss the irreducible complexity of some key issues of the European integration process, while in the 'Engaging the Institutions' sessions participants will be asked to actively dialogue with civil servants at work on the issues at stake. The laboratories will encourage cooperation between participants in order

to address specific issues and elaborate creative solutions.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. law, political science, political philosophy) who are interested in understanding how to manage the changing features of the EU and new directions of the European integration process.

Coordinator and key teaching staff

Coordinator: Edoardo Chiti

Key teaching staff: Francesca Biondi Dal Monte, Edoardo Bressanelli, Roberto Buizza, Giacomo Delledonne, Alberto Di Martino, Barbara Henry, Anna Loretoni, Giuseppe Martinico, David Natali, Gianluigi Palombella, Emanuele Fazio, Andrea Giorgi, Federica Merenda, Roberto Talenti, Lucia Virardi

More info [here](#)



From minimally invasive surgery to nanorobotics: a voyage in the field of intervention robotics

 **English**  **On site**

 **Period**

March 31st-April 4th, 2025

 **Deadline for Registration**

February 2nd, 2025



Coordinator and key teaching staff

Coordinators: Stefano Palagi, Sara Moccia, Veronica Iacovacci

Key teaching staff: Arianna Menciassi, Gastone Ciuti, Matteo Cianchetti, Linda Paternò, Emilio Trigili, Tommaso Proietti

More info [here](#)

Learning objectives

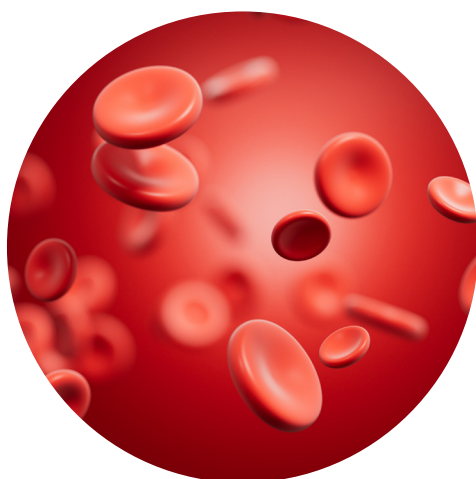
The Seasonal School will introduce participants to the highly interdisciplinary field of technologies for minimally invasive interventions, with focuses on intervention robotics and artificial intelligence, smart materials and innovative components, micro/nanorobotics, and on how to make innovative technologies meet the clinics. At the end of the School the participants will have gained knowledge on the state of the art and potential future developments of robotics and technologies for minimally invasive interventions; understanding of the scientific, clinical, and technological challenges posed by these highly interdisciplinary research field; hands-on experience on topics related to intervention robotics; ability to propose innovative solutions for complex scientific-technological problems with a multi-disciplinary and holistic approach.

Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment that will encompass lectures on fundamentals as well as on cutting-edge research topics in the field, hands-on activities, demonstrations of current research activities, case studies, and a group project work.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. engineering, physics, mathematics, medicine, computer science) who are interested in robotics, mechatronics, AI, smart materials and/or minimally invasive medicine.



AIRONE

Artificial Intelligence and Robotics in exteNded rEality

🇬🇧 **English** 📍 **On site**

📅 **Period**

April 7th-11th, 2025

📅 **Deadline for Registration**

February 2nd, 2025



Learning objectives

The Seasonal School AIRONE will allow students to examine the most recent research developments at the intersection of Robotics, Artificial Intelligence and Extended Reality and to review their applications in a diverse range of sectors, e.g., Health, Space, Transportation, ... AIRONE will address the following topics: principles of “extended” reality technologies (Virtual Reality, Augmented Reality and Mixed Reality), methodologies and tools for the realization of immersive telepresence experiences, for the design and control of collaborative robots and wearable robotic systems for telepresence, for designing and programming next-generation artificial vision systems, machine learning and Artificial Intelligence tools, including Deep Learning for robotics; basic knowledge of the principles, methods and technologies of Human-Robot Interaction and Occupational Biomechanics in occupational contexts, hands-on activities, overview on applications and discussion of use cases applying these technologies.

Teaching methodologies

The proposed methodologies involve students in an interactive and proactive manner in the training process, by integrating theoretical concepts with the practical experience of individual participants, in continuous interaction with primary teachers and young researchers active in the international research community. Lectures, laboratory activities and exercises will be carried out. Case studies will also be discussed to show the applications of the concepts and methods presented,

and simulations involving an active role of students will be presented.

Target participants

The course is intended for Italian or foreign university students enrolled in a master’s degree course, including single-cycle, in a master’s diploma, in a doctoral course, preferably in the STEM disciplines, who are interested in the above learning objectives.

Coordinator and key teaching staff

Coordinator: Carlo Alberto Avizzano

Key teaching staff: Massimo Bergamasco, Antonio Frisoli, Massimiliano Solazzi, Marco Fontana, Tommaso Andreussi, Alessandro Filippeschi, Franco Tecchia, Marcello Carrozzino, Daniele Leonardis, Francesco Porcini, Cristian Camardella, Paolo Tripicchio, Salvatore D’Avella

More info [here](#)



CHINA FOCUS

Issues On China: Innovation, Society and Culture

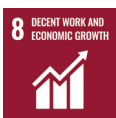
 **Italian**  **On site**

 **Period**

May 5th-9th, 2025

 **Deadline for Registration**

Aprile 2nd, 2025



Learning objectives

The Seasonal School “Issues on China: Innovation, Society and Culture” is an intensive program held from May 5 to May 9, 2025, in Pisa, organized by the Sant’Anna School of Advanced Studies. It critically analyses economic, social, political, and legal aspects of modern China through cutting-edge research. The interdisciplinary event focuses on engaging with China’s people, countries, and systems, exploring Chinese innovation, geopolitical issues, and legal systems. Chinese language lessons are provided. The program addresses China’s assertive role in the international order, offering European and Italian scholars’ insights into its evolution, challenges, and contradictions. Dedicated to the late Filippo Nicosia, former Consul General of Italy in Chongqing, the Seasonal School aims to provide comprehensive learning objectives, fostering critical analysis, interdisciplinary understanding, language engagement, pluralism of perspectives, global role analysis, evaluation skills, cultural understanding, and insight into contradictions.

Teaching methodologies

China Focus utilizes various teaching methodologies to enhance participants’ understanding of China:

Lectures: Led by experts, providing foundational knowledge on China’s innovation, society, and culture.

Interactive Sessions: Dynamic engagement through discussions, questions, and collaborative activities.

Case Studies: Analysis of real-world Chinese cases, fostering critical thinking and

application of theoretical concepts.

Workshops: Hands-on sessions for deepening understanding through group activities and discussions.

Interdisciplinary Approaches: Integration of insights from economics, sociology, politics, and law for a holistic understanding.

Guest Speakers: Experts with direct China experience share perspectives and practical insights.

Language Classes: Chinese language lessons by native speakers to improve communication and cultural understanding.

Cultural Activities: Integration of performances, exhibitions, and traditional events to enhance cultural awareness.

Target participants

The target participants for ‘China Focus’ are primarily undergraduate, postgraduate, and PhD students from other universities.

Coordinator and key teaching staff

Coordinator: Alberto Di Minin

Key teaching staff: Antonio Frisoli, Marco Bonaglia, Ida Fiore

More info [here](#)



DALIDA

Data Liabilities and DAMages

🗨 **English** 📍 **On site**

📅 **Period**

May 12th-16th, 2025

✍ **Deadline for Registration**

April 6th, 2025



Learning objectives

DALIDA Seasonal School aims to develop skills and competence to deal with tort and contractual liabilities and personal injury damages compensation, considering the current challenges arising from the application of data science methodologies to case-law analysis and bioengineering solutions to improve the quality of life for injured persons.

Participants could familiarize with the EU data strategy initiatives and their consequences on fundamental rights protection in a comparative perspective, focusing on:

- i) the role of digitalisation and predictive tools to assess pecuniary and non-pecuniary losses;
- ii) new risk management strategies for digital scenarios;
- iii) AI-based and robotics applications to restore functionalities and reduce the impairments of personal injuries;
- iv) systematic effects on tort and contractual liability.

The acquired methodologies will complete existing traditional learning approaches for smart professionals (e.g. lawyers, judges, insurance advisors, clinicians, forensic experts, data scientists and software developers, engineers, policy makers, etc).

Teaching methodologies

DALIDA participants will find an interactive, interdisciplinary, and international learning environment, addressed to combine comparative law analyses on personal injury damages compensation with the big data and technological innovation challenges applied to data-driven scenarios. Theoretical

classes, case-studies and simulations discussed together with cross-disciplinary experts will provide unique lenses to interpret the interplay between data regulations, liabilities paradigms, and damages compensation.

Target participants

Undergraduate, postgraduate, and PhD students from different backgrounds (e.g. law, political science, economics, management, forensic medicine, life sciences, computer science and engineering) who are interested in interpreting the interplay between the EU data strategy, tort and contractual liabilities, and damages compensation in real scenarios, where the big data analysis and the technological innovation are daily contributing to shape new services and products.

Coordinator and key teaching staff

Coordinator: Denise Amram

Key teaching staff: Giovanni Comandé, Caterina Sganga, Maria Gagliardi, Antonio Davola, Benedetta Guidi, Simona Crea, Marco Controzzi, Lorenzo Vannozzi

More info [here](#)



PROREMOTE

Proximity care for remote areas

 **English**  **On site**

 **Period**

May 19th-23rd, 2025

 **Deadline for Registration**

April 6th, 2025



Learning objectives

Recently, the importance of promoting local health and ensure proximity of care for patients emerged as evident from different perspectives. Covid-19 pandemic was an exceptional period that brought awareness to politicians, professionals, and people about the necessity of renewing lives in terms of sustainability, digital access to services, and social connectedness. How is it possible to pursue these objectives also in inner areas, mountain areas or small islands? How is it possible to guarantee equity of treatment and excellence of care when citizens live far from large welfare centres? PROREMOTE is designed to present evidence and applied cases to answering these questions.

The Seasonal School will introduce participants specifically to the urgent topic of proximity of care according to the social, psychological, experimental and engineer sciences. Students will be involved on the issues inherent to the enhancement of data, organizational models, and technological solutions for local areas. Implications for decision making and service management will be provided, with a focus on the support to innovation of services and on the strengthening social protection networks of the analysed contexts.

Teaching methodologies

Students will find an interactive and interdisciplinary learning environment that facilitates problems understanding, setting, and solving, as well as the development of a decision-making process that considers and values all the actors of the analysed contexts. Several experts from different disciplines will

participate in the program presenting their competence and experience.

Target participants

Undergraduate, postgraduate and PhD students who are interested in deepening their knowledge about the most recent interdisciplinary approaches in managing the healthcare services for remote areas by using technological and organizational innovative interventions.

Coordinator and key teaching staff

Coordinator: Francesca Pennucci

Key teaching staff: Sabina Nuti, Michele Emdin, Claudio Passino, Milena Vainieri, Piero Castoldi, Luca Valcarengghi, Gastone Ciuti, Alberto Giannoni, Luca Gori

More info [here](#)



Space Plasma Propulsion: Advancements, Research, and Know-how

 **English**  **On site**

 **Period**

May 26th-30th, 2025

 **Deadline for Registration**

April 6th, 2025



Learning objectives

The SP2ARK Seasonal School will introduce participants to the topic of plasma-based electric propulsion (EP), which represents an enabling technology for a growing number of space applications, from low Earth orbit constellations to interplanetary missions. Interest in EP systems has accelerated in recent years, thanks to the technological maturity achieved by several concepts and the growth of a new space economy. However, the development of electric thrusters involves competencies that are challenging to gather in conventional university courses, ranging from space system design and mission analysis to plasma physics, electronic engineering, space environment simulation, and on-ground testing. The SP2ARK Seasonal School will address these topics and the research activities underlying the development of electric propulsion systems.

Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment that will engage them with discussions on case studies and laboratory activities. By integrating theoretical concepts with practical hands-on experiences, the seasonal school will allow the participants to acquire a deeper understanding of space propulsion, low-temperature plasmas, vacuum technology, and laboratory testing. The teaching approach will also rely on interactions with researchers and professionals active in the aerospace industry to provide real world examples and lessons learnt.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. engineering, physics, mathematics, economics) who are interested in the development of innovative solutions for space exploration, combining theories and case studies with hands-on laboratory experience.

Coordinator and key teaching staff

Coordinator: Tommaso Andreussi

Key teaching staff: Fabrizio Paganucci, Vittorio Giannetti, Andrea Macchi, Eugenio Ferrato

More info [here](#)



ARTist

Pervasive ARTificial Intelligence for Next-G Softwarized neTworks

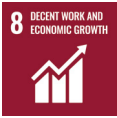
 **English**  **On site**

 **Period**

June 9th-13th, 2025

 **Deadline for Registration**

April 27th, 2025



Learning objectives

Future mobile network technologies (B5G, 6G, i.e. next-G) will allow the creation of new applications that will transform the way people live, work and interact with the environment. The educational objectives of the proposed seasonal school are to understand and to learn:

- the architectures of future cellular systems with regard to the radio interface, the wired segment and the software components such as virtualized entities, edge computing and AI-aided resource allocation;
- the main features of data traffic transport and routing technologies in 5G/6G networks, telemetry techniques and advanced traffic conditioning techniques; the role of AI in Next-G Softwarized neTworks, including how it can be used to automate network operations, optimize resource allocation, and enhance the overall user experience.
- the emerging services (VR, telemedicine, metaverse) that may be delivered by next-G networks and how they are able to meet the stringent requirements that such services require;
- the impact of the aforementioned services on the sustainability of the planet and the global challenges of the 21st century.

The Seasonal School ARTIST has been designed to critically evaluate and elaborate on these new technologies and the opportunities that are offered by next-G network architectures.

Teaching methodologies

ARTIST is entirely delivered in English and will include a mix of front teaching and hands-on sessions. The in-class teaching

consists of focus sessions on key topics, industrial talks, brainstorming and break-out sessions. The hands-on part will take place through laboratory sessions organized over 4 afternoons.

Target participants

Main candidates for attendance are Master of Science (Laurea Magistrale) students in the area of Computer Science, Telecommunication Engineering, Electronic Engineering, Aerospace Engineering, Biomedical Engineering, Automation Engineering. Postgraduate students and PhD students in the aforementioned disciplines interested in the Seasonal School topics are also welcome.

Coordinator and key teaching staff

Coordinators: Piero Castoldi, Luca Valcarengi, Andrea Sgambelluri
Key teaching staff: Andrea Sgambelluri, Nicola Sambo, Giulio Cossu, Francesco Paolucci, Filippo Cugini, Alessandro Pacini, Emilio Paolini

More info [here](#)



 **English**  **On site**

 **Period**

June 9th-13th, 2025

 **Deadline for Registration**

April 27th, 2025



Learning objectives

Africa is key to many of today's global political challenges. It offers a unique prism for understanding, and addressing, issues of international relevance such as inequality and insecurity, climate change and extractivism, liberal order crises and governance challenges. The flourishing of 'Africa Strategies' by numerous international actors (including the recent adoption of the so-called Mattei Plan by the Italian government) testifies to the growing salience of Africa in international fora. Yet the predominance of simplistic and stereotypical readings do not adequately capture the rapid evolution of the scholarly reflections on these issues. Drawing on insights from international relations, political economy, political ecology, cultural and postcolonial studies, POLAF will enable participants to: apprehend the ongoing transformations of Africa's politics of contention; learn and apply a variety of theoretical perspectives and methodological tools of social science; get familiarized with the critical and practical skills which might help build one's career in international institutions, regional organisations and NGOs, but also in think tanks, research centres and academia.

Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment, proposing a combination of research-led and research-oriented formats. We will exploit the synergies between lectures delivered by renowned international and SSSA lecturers; research roundtables; simulations and roleplays. Additional cultural activities will also be

offered in the evening hours, such as audio and video screening sessions, to encourage knowledge of the self-representations of contemporary Africa.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds who have already obtained at least 60 ECTS from these subject areas: political science, sociology, economics, history, philosophy, law, foreign languages, geography, area studies.

Coordinator and key teaching staff

Coordinators: Francesco Strazzari, Luca Raineri

Additional project team members: Laura Berlingozzi

Key teaching staff: Lorenzo Gasbarri, Enrico Pè, Matteo Dell'Acqua, Leonardo Caproni, Andrea Roventini, Francesco Lamperti

More info [here](#)



Technological Dimensions of War: Legal, Ethical and Conceptual Challenges

🗨️ **English** 📍 **On site**

📅 **Period**

June 23th-27th, 2025

✍️ **Deadline for Registration**

May 11th, 2025



Learning objectives

The Seasonal School will engage students in exploring the legal meaning of the technological development of conflict and warfare, particularly from the perspectives of international law, criminal law and international criminal law. Recently we are witnessing an overwhelming technological evolution of warfare practices and doctrines. The impact of the cybernetic dimension is transforming warfare into a practice far removed from its traditional conception. This phenomenon raises enormous problems of conceptualization and legal framing. Artificial intelligence and human-machine interaction are transforming contemporary armed conflicts. As evidence from the battlefields shows, with the massive use of autonomous weapon systems (AWS) and sophisticated war machines, algorithmic warfare can no longer be considered a dystopian reality. As the application of AI on the battlefield reduces (or multiplies) the scale of human agency, the fundamental categories of state responsibility and criminal individual liability provided by international law and international criminal law are being challenged. The Seasonal School aims to provide participants with a critical and interdisciplinary understanding of the legal challenges posed by the technological dimensions that characterize contemporary conflicts.

Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment that enables a comprehensive and in-depth understanding of the burning issues addressed by the Seasonal School. The Seasonal School

combines traditional teaching methods with active learning techniques. The face-to-face classes always include moments of interaction between faculty and students aimed at discussing the texts and materials made available to the participants. Participants will be involved in group research activities aimed at preparing short presentations on some of the topics covered in the Seasonal School.

Target participants

The main target of the of the Seasonal School is represented by undergraduate, postgraduate, and PhD students from different backgrounds.

Coordinator and key teaching staff

Coordinator: Giuseppe Di Vetta, Gaia Fiorinelli
Key teaching staff: Gaetana Morgante, Francesca Capone, Emanuele Sommario, Luca Raineri, Lorenzo Gasparri, Andrea Vandin, Andrea Bertolini, Giorgio Buttazzo, Alessandro Biondi

More info [here](#)



 **English**  **On site**

 **Period**

June 30th-July 4th, 2025

 **Deadline for Registration**

May 11th, 2025



Coordinator and key teaching staff

Coordinator: Daniele Moschella

Key teaching staff: Giulio Bottazzi, Giovanni Dosi, Arianna Martinelli, Julia Mazzei, Andrea Mina, Alessandro Nuvolari, Federico Tamagni

More info [here](#)

Learning objectives

The Seasonal School programme on “Economics of Innovation and Technological Change” addresses both the theoretical and the empirical underpinnings of the economics of innovation and technical change, as well as recent debates at the frontier of the field. The topics covered include: technological paradigms and trajectories, innovation and firm strategies, sectoral patterns of innovation, analysis of patent data, innovation and economic growth, innovation and competitiveness, innovation and intellectual property rights. The programme also offers an overview of statistical methods and techniques aimed at analysing relevant empirical data for innovation studies. Students will gain frameworks and tools to understand key-issues in this field: how do we measure innovation? How do firms exploit innovation in different sectors? What is the connection between intellectual property rights regimes and innovation? Which are the most effective tools to foster innovation in different contexts?

Teaching methodologies

Students will engage with and will learn from full-time professors from the Sant’Anna Institute of Economics through a mix of lecture-based and laboratory classes.

Target participants

Advanced undergraduate, Master’s and PhD students, notably from Economics and other Social Sciences disciplines, who are interested in the Economics of Innovation.



Agent based models in Economics: theory, toolkit, and policy laboratories

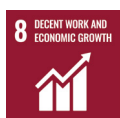
 **English**  **On site**

 **Period**

July 7th-11th, 2025

 **Deadline for Registration**

May 18th, 2025



Coordinator and key teaching staff

Coordinator: Maria Enrica Virgillito

Key teaching staff: Giovanni Dosi, Giorgio Fagiolo, Alessio Moneta, Francesco Lamperti, Andrea Roventini, Marcelo Pereira, Lilit Popoyan

More info [here](#)

Learning objectives

The Seasonal School is intended to achieve the following objectives:

- Learning of agent-based modelling techniques (ABMs) as a tool of analysis and interpretation of economic and social processes.
- Development and design of agent-based models through software laboratories (Laboratory for Simulation Development platform, LSD).
- Introduction to statistical and econometric techniques for the analysis of macro-evolutionary agent-based models (R software).

Competencies provided include:

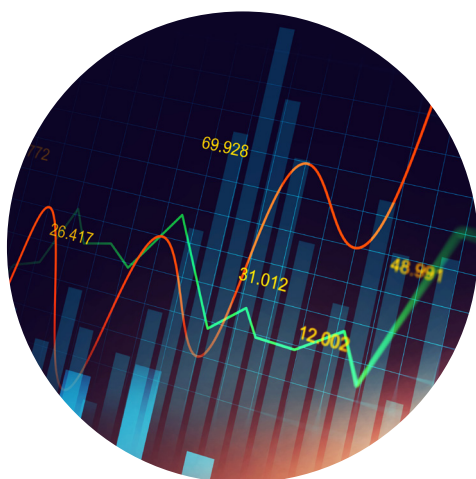
- Theories and applications of agent-based models in micro and macroeconomics uncovering diverse thematic areas such as technical progress, business cycles, labour markets, economic growth, climate change.
- Empirical validation and analysis of models' parametric space.
- Scenarios-based analysis and policy experiments.

Teaching methodologies

Frontal lectures, keynote lectures, laboratories, students working groups.

Target participants

Master and PhD students in economics, statistics, physics, social sciences



FemGen

Gender Studies and Feminist Theory.

A multidisciplinary perspective

 **English**  **On site**

 **Period**

July 7th-11th, 2025

 **Deadline for Registration**

May 18th, 2025



Learning objectives

The Seasonal School will introduce participants to the pivotal perspective of gender studies with a multidisciplinary critical perspective, combining different approaches in social sciences. In order to tackle the most relevant issues in contemporary gender studies and feminist theory, participants will be provided with most relevant conceptual tools from an epistemological, political, legal and philosophical point of view as well as with a cross-cutting knowledge of the different theoretical-methodological frameworks employed in the debate. Other than providing a theoretical-political framework on the contribution of the gender dimension in social sciences, the training programme will require participants to reflect on global and intersectional perspectives as well as on the impact of policies and politics on everyday challenges: e.g. the structural dimension gender-based violence, sexual and reproductive health and rights (SRHR), the emerging of situated needs for different subjectivities in public and collective space. The aim of the Seasonal School is to enable students to understand the impact of such challenges on the society as a whole, from a political, legal and social perspective, raising a critical attitude informed by a feminist intersectional standpoint.

Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment with teaching activities characterized by interactive learning and participative methodologies. Both external academic experts as well as practitioners working in

civil society organizations will participate to the program with workshops that will further explore the themes addressed in class. Other complementary activities such as movie-screenings and team-building games will be held as to encourage interaction and discussion among the participants.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. philosophy and humanities, anthropology, law, political science, economics, sociology, history, but also students in applied sciences) who are interested in gender studies and feminist theories.

Coordinator and key teaching staff

Scientific Coordinator: Anna Loretoni

Education Activities Coordinator: Federica Merenda

Education Activities Coordinator: Ilaria Santoemma

Key teaching staff: Barbara Henry, Elena Vivaldi

More info [here](#)



BEEP

Biology for human space exploration

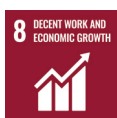
 **English**  **On site**

 **Period**

July 21st-25th, 2025

 **Deadline for Registration**

May 18th, 2025



Coordinator and key teaching staff

Coordinator: Debora Angeloni

Key teaching staff: Ivana Barravecchia, Valentina Colla, Matteo Dell'Acqua, Alberto Giannoni, Anna Mensuali, Chiara Pucciariello, Donato Romano

More info [here](#)

Learning objectives

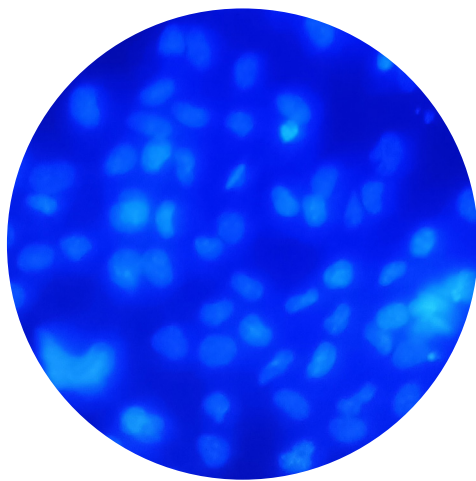
The Seasonal School will introduce participants to the urgent topic of space biology, a discipline that aims at developing a better understanding of how life operates in built environments in space, or in ground-based experiments that mimic aspects of spaceflight, to prepare for future human exploration missions far from Earth. An overview of different research areas dealing with basic research and with applications for human life support will be offered. At the end of the course, students will be familiar with the central themes of biological and biomedical research in support of human space exploration.

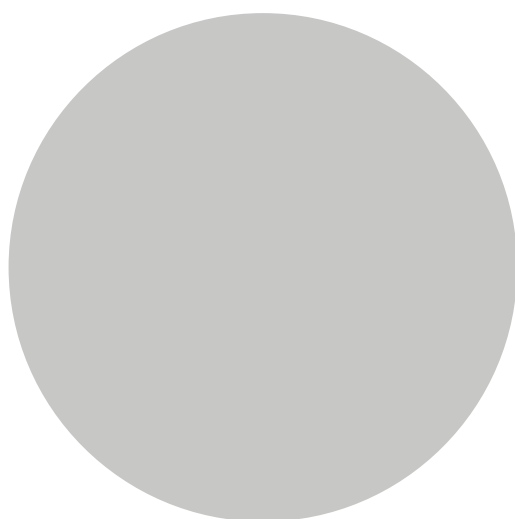
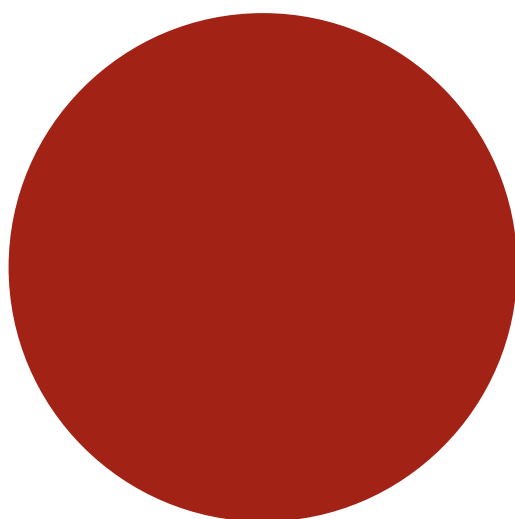
Teaching methodologies

Students will find an interactive and cross-disciplinary learning environment that will proceed through classroom lessons, with multimedia aides, and biology lab exercises. At the end of the course, we will visit the facility of a space enterprise.

Target participants

Undergraduate, postgraduate and PhD students from different backgrounds (e.g. law, political science, life sciences and engineering) who are interested in space research.





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