



INTERNATIONAL TALENT CAMPUS

VENICE

Summer School Catalogue

July 9 - August 6, 2016



WHAT ABOUT

Overview

International Talent Campus is a Summer School promoted by GATE Italy, open to Italian and International Students ages 10-18. The Summer School is intended to provide students with an unforgettable study abroad experience which enables them to pursue an in-depth study about topics of interest, enjoying an international citizenship and increasing their abilities and knowledge.

Aims

ITC summer programs emphasize personal as well as intellectual growth. ITC strives to create an intellectually engaging environment that energizes its students, enjoying an international citizenship.

Target

The Program is focused on gifted and high-achieving students from around the world.

Session 1, July 9-23: ITC offers unique programming for gifted and talented students ages 14-18

Session 2, July 23- August 6: ITC welcomes Students ages 10-13 and their families to share challenging activities and enjoy Venice during their staying.

Main contents of the Program

ITC Programs offer a wide variety of courses taught in science (Math, Physics, Science and Magic, Space Robotics, Biogenetic and Astrophysics) and humanities (History, Critical Thinking, Cryptography, Film Making, Digital Telling, etc).

Courses are taught by Professors from the Universities of Padova and Venice and by qualified academic experts and teachers.

Students will participate in the full curriculum of ITC including a 4-period academic day, evening programs, getaway days and weekend activities.

At the end of the Program students will receive a Certificate of Attendance.

TRAINING ACTIVITIES

ITC offers a wide range of training activities delivered by lead experts and academical teachers.

The methodological approach of the Program will be to translate Theory and Research into practice in laboratory sessions, by applying most of the activities to concrete case studies and best practices. On the basis of this methodology, students will be learning by doing, using their senses, exploring the environment of people, places and events in the historical places and famous venues.

The maximum number of participants in each core class would be 15 students, in order to guarantee the maximum flexibility and the highest efficiency of the learning process.

ARCHITECTURE

The Floating City

Look more closely at the unique architecture of one of the world's most beautiful cities. Venice is an architectural and engineering masterpiece. The city was built entirely on water, and Renaissance architects had to choose specific materials suited to marine conditions. They developed unique techniques for constructing the historic buildings we see today. In the process you will delve into architectural concepts, information on the history of local architecture, and the contributions of such great innovators as Andrea Palladio and Jacopo Sansovino.



ART

Learning in, through and about the Arts

What is creativity? What is inspiration? Do they suffice in the making of a work of art? Take part in workshops on art, nature, games, the need for rules, and the need to break away from them ... in an orderly but imaginative way. Visit the Peggy Guggenheim Collection, one of Europe's premier museums devoted to modern art.





CREATIVE THINKING

Thinking outside the box

Jeans, plastic, newspapers, telephones... all familiar components of everyday life; all invented by Italians. Italians have contributed to some of the greatest inventions the world has ever seen, and you may not have known about them. From Leonardo da Vinci to Federico Faggin, the inventor of the microchip, people have been able to see new solutions, "thinking outside the box". Here is a class that will help you learn to think beyond the expected! Will you have the next great idea?

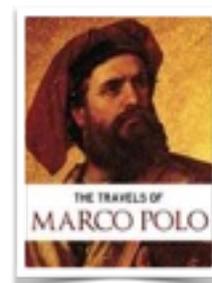
(We didn't mention food on purpose, but what do you think about pasta and pizza?)



HISTORY

Following Marco Polo's Silk Road.

At the beginning of the seventeenth century, Venice was the capital of the independent Venetian Republic known as La Serenissima. Venice was the center for commerce and culture in the Mediterranean. Starting **in Venice**, follow in Marco Polo's footsteps across twenty fascinating years of travel and discovery.



PHOTOGRAPHY

Secrets of Venice

Join this photo adventure and learn tips on lighting, composition, reportage and photographing people along the way. You will discover the hidden corners of the city, the most picturesque, where the real soul of the city beats. You will wander in calli and campielli, learning how light and water combine to get visual masterpieces. The morning markets, as well as inner canals at sunset, will be a perfect "shooting ground" to get outstanding pictures. A real must-do experience for all photo-lovers! Bring your own digital camera to participate in this class to capture unforgettable memories !



ENVIRONMENT

Venice in environmental peril?

Venice and its environment are perceived to be in peril due to rising sea levels, tourism, and modern development. Are these threats myths or reality? This class explores Venice's environmental risks, and offers a proposal to modernize the city while preserving its ancient heritage.



VISUAL ART

The art of making a short movie in Venice

This course will teach you all the necessary skills to make a short film. You will work through the entire process from developing ideas, writing a script, producing, directing, filming and editing. Bring back good memories of your ITC experience! Come learn the trade of award-winning directors like Sorrentino, Benigni and Fellini. Did you know Venice is home to the oldest film festival in the world? Venice International Film Festival, organized by La Biennale di Venezia.



BIOENGINEERING

Bioengineering technologies

Explore the field of bioengineering: we like to think of it as the application of engineering principles to biological systems. A very broad area of study, bioengineers have the tools to approach unmet challenges from multiple perspectives, and to devise innovative solutions in biology, health and medicine. ITC students will explore solutions in the many biomedical research areas.



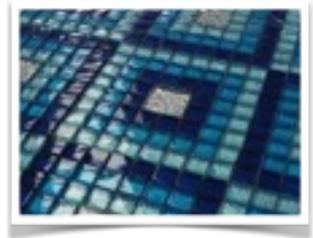


CHEMISTRY

Murano glass lab: Where Art meets Science

Magic show or chemistry lab? Sometimes it's hard to tell the difference! Chemical reactions often produce spectacular changes that appear to happen just by magic.

Thousands of different chemical compositions can be made into glass. Different formulas affect the mechanical, electrical, chemical, optical, and thermal properties of the glasses that are produced. Discover the secrets of the art of glassblowing and meet the great glass-makers in Murano furnaces.



ENGINEERING

The Arsenal

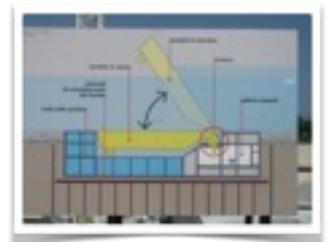
The Arsenal of Venice is a complex of former shipyards and armories clustered together in the city. It was responsible for the bulk of the Venetian Republic's naval power. Galileo became a consultant to the Arsenal, advising military engineers and instrument makers. The wealth and power of Venice rested in its ability to control trade in the Mediterranean. You'll be taken to a visit to the gondola workshop and learn how a gondola is made.



ENVIRONMENT AND TECHNOLOGY

Novel solutions to complex problems : MOSE and Venice Lagoon

Our world faces many challenges today such as climate change. Ever wonder how civil engineers could solve real world problems? The precious city of Venice has begun to sink at an alarming rate, threatened by increasing water levels and ever-frequent flooding. Discover how Italian engineers designed the MOSE project, consisting of 79 mobile floodgates that will, when raised, seal off the lagoon from the Adriatic Sea. Understanding the city's engineering past may provide the means to preserving it for generations to come.





GENETICS AND GENOMICS

DNA Diagnostic

This course introduces you to genetics and modern genomics. Experts in genomics strive to determine complete DNA sequences and perform genetic mapping to help understand disease. The course will also give a brief introduction to the key concepts in genetic engineering, describing the development of genome-scale technologies and their application to all areas of biological investigation.



CRYPTOGRAPHY

Journey into Cryptography

Welcome to Cryptography, the study of transforming information in order to make it secure from unintended recipients or use.

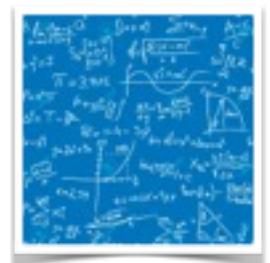
In the Internet era, security becomes a tremendously important issue: cryptography is an indispensable tool for protecting information in computer systems. This course features a rigorous introduction to modern cryptography, with an emphasis on the fundamental cryptographic primitives of public-key encryption.



MATHEMATICS

Enrico Fermi and the Golden Ratio

Discover some of the mysterious concepts of math, such as the golden ratio and Fermi questions. Examine Palladio's works of architecture to find the "divine proportions" within structures. Dissect the paintings of Leonardo da Vinci to reveal their mathematical mysteries. Explore Fermi questions, named after the famed Italian mathematician, that require us to take multiple directions when solving a problem. Engage in algorithmic and intuitive approaches to solve the most daunting problems that do not have single solutions: collaboration and worldly wisdom are used in conjunction with mathematical and scientific knowledge to arrive at solutions. Look at the magnificent ways that algebra and geometry intersect with art and science.





MECHANICS AND PHYSICS

The clock tower

Let's come to explore classical mechanics as applied to the clock which all use principles of physics! Understanding scientific topics such as speed and momentum. Let's come broaden your understanding of physics and experiment with new and exciting designs that test principles of this exciting field of science.



NEURO-PLASTICITY

The malleable brain

Neuroplasticity studies reveal your brain's amazing malleability ! How would you like to be better at problem solving, learning a new language, increasing your ability to focus, regaining body and brain functions due to an accident? The brain is very capable of reorganizing itself by forming new neural connections throughout life. In this class you will explore the possibilities and far-reaching implications of Neuroplasticity for almost every aspect of human life.



SCIENCE

From the origin of the Universe to Discovery of Earth 2.0

Come pursue your questions about Earth and its relationship to the rest of the universe. Have scientists discovered Earth 2.0? The new planet, named Kepler 452b, is an astonishing scientific discovery that could forever change the destiny of the human race: another planet capable of sustaining human life. Consider where we came from. What has happened to our planet over the past billions of years, and what will happen to it in the future? Design your own Mission to Earth 2, plan a planetary expedition, or design a new way to research the outer planets! Come pursue your questions about Earth and its relationship to the rest of the universe.



SPYING

Treasure hunt in Palazzo Ducale

This interactive visit is designed for younger visitors, enabling them to discover the history and artistic wealth of the Palace. You will discover anecdotes, legends and secrets of one of the most beautiful and historical palaces of Venice. Enjoy this funny game for adults and children to discover the masterpieces of the Doge's Palace, the habits of the nobility and the curiosities of life in Venice!

Take part in this treasure hunt that will leave you breathless!



PHYSICS

The Physics of Light

Starting with Einstein's Theory of Relativity, this course explores the true nature of light, peers inside the atom, and looks ahead to the most cutting edge theories in physics. This intriguing course uses the medium of light to explore the concepts of physics from familiar theories, such as Newton's Law of Gravity, to the latest in scientific research, like string theory and M-theory.



ASTROPHYSICS

The science goals of Astrophysics

This course will take you through an incredible journey where you learn about the unsolved mysteries of the universe, exoplanets, black holes and supernovae, and how quantum mechanics and relativity help explain these objects. The study of astronomy provides you with a wide range of skills in math, engineering, and computation.



LIVING IN THE CAMPUS

Housing

Students will reside at University Youth Residence Ai Crociferi. Accommodation is either in single or twin or triple (shared) rooms with a bathroom, for students who are of the same gender and age group.

ITC Residence has live-in student resident assistants, each Tutor supervising a group of 15 students. Tutors and students live, eat, socialize and study together within the context of ITC campus. Tutors participate in socialization activities and excursions during the weeks.

Individuals with disabilities or other special needs should contact the Liaison Office at the time of registration.



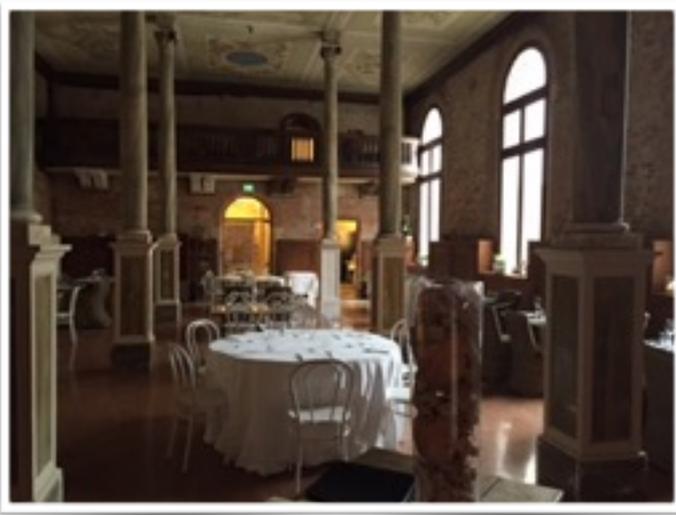
Meals

Meals are served buffet style in the dining halls of the Residence on campus.

The University of Venice dining facility is committed to accommodating student's individual dietary needs. Students with food allergies and intolerances are kindly asked to identify their needs at the time of registration.

Our Mediterranean diet, rich in fruits and vegetables, features healthy food and presents the traditional delicious Italian dishes.

Lunch will be served at 12.30 p.m. until 2.00 p.m.
Dinner will be served at 7.00 p.m. until 8.30 p.m.
During the excursions, students will be provided





with packed lunch.

Campus Facilities

Students can spend their leisure time playing with their friends, and participating in traditional sports, such as soccer and basketball. These activities are supervised by our staff during scheduled programs.



ITC campus has laundry facilities available to students residing in the halls, equipped with washers and dryers. Other facilities are study halls, terrace, garden, kitchen, and free Wi-Fi.

Students could enjoy the snack bar and the recreation areas, participating in parties and games.



Basic rules

Students' safety is an important issue for us.

ITC holds an all-day campus-wide orientation for all students, that will introduce them to the wide array of academic, cultural, and social experiences available at ITC. This compulsory session covers important campus regulations relating to students' stay in Italy. During the weeks students will be escorted by a staff member on campus at all times.

Any off-campus excursions will require the supervision of a staff member.

Students will be provided with a city map and Venice City Pass, which allows students to access public transport, accompanied by their tutors, within the city.

Free time and Excursions

In order to increase and empower socialization and friendship between students, several activities will be organized.

Venice is an extraordinary architectural masterpiece in which even the smallest building contains works by some of the world's greatest artists such as Palladio, Giorgione, Titian, Tintoretto, and Veronese. Students will have the chance to discover the hidden Venetian alleys and canals by visiting its charming districts full of everyday life, enjoying Venice's best local **Bacari** on a food tour !



Redentore Firework Festival

The Festa del Redentore is an event held in [Venice](#) the third Sunday of July when the [fireworks](#) play an important role. On Saturday, the eve of the festival, [fireworks](#) are let off. Preparations begin early in the morning when people begin to decorate their boats, or the small wooden terraces on rooftops from where they can admire the [fireworks](#). At sunset, [Saint Mark's](#) basin begins to fill with boats of all kinds, decorated with balloons and garlands, and thousands of Venetians await the fireworks while dining on the boats. Around 10 o'clock at night, from pontoons placed nearby the island of [San Giorgio Maggiore](#), the [fireworks](#) begin and Saint Mark's basin becomes one of the most atmospheric stages in the world. The [fireworks](#) last for around 45 to 60 minutes, illuminating the night and arousing intense emotions in both Venetians and visitors. Once the [fireworks](#) are over, the young people of the city head off to the [Lido](#), where they sit on the sand and wait for dawn.



Gateway Trip

An off-campus trip is planned for one Saturday to the city of Padova. Students will have the chance to visit the Scrovegni Chapel, a masterpiece in the history of painting in Italy and Europe in the 14th century, is considered to be the most complete series of frescoes executed by Giotto.

Created in 1545, the Botanical Garden of Padova is the oldest existing university garden in the world.



Day Trip to the Seaside

Venice is also a seaside resort town and students will have the chance to spend a full day at Venice Lido (Lido di Venezia): the narrow strip of land which separates the central part of the Venetian lagoon from the Adriatic Sea. Once just a natural barrier, the Lido is now Venice's seaside. The Adriatic Sea is clean and warm, and its sandy beach is ideal for children.

It's curious to know that the word 'lido' is used in the English-speaking world to describe bathing establishments.

The Lido is about ten minutes by vaporetto (water-bus) from the nearest stops in Venice.

Any off-campus or out-of-boundaries excursions will require the supervision of a staff member.



GATE ITALY - ITC

THE APPLICATION PROCESS

Admission to the International Talent Campus for the Gifted and High-Achieving Students is on a first-come, first-served basis for qualified students.

Applications are processed upon receipt and require two weeks for review.

Admission to the International Talent Campus shall be granted at the sole discretion of GATE Italy. Applications will be accepted only if space is available. Only a limited number of students can be accepted into each session. Please note that GATE Italy requires evidence of high academic ability and/or achievement to be submitted with the application.

HOW TO APPLY

Complete the ITC GATE Italy Online Application.

The € 300,00 non-refundable application fee must accompany your completed, signed, online application (credit card payment). You will be billed for the program fees.

Download the application as a PDF document and submit via mail the completed Application forms at international@talentgate.it or info@talentgate.it or by fax at (0039) 049 8235701.

- In order to speed your Application Process, please submit your application in conjunction with eligibility documents.

The € 300,00 non-refundable application fee must accompany your completed, signed, online application. You will be billed for the program fees.

Information

Lara Milan
International Liaison Manager
GATE - ITALY
Scientific Association for Gifted And Talented Education
Padova - Italy
Mob. 0039 3296670222
www.talentgate.it
mail: international@talentgate.it

