



international charrette
TORONTO

feb. 21 - mar 1, 2023

deadline for applications: **December 22, 2022**



Brookfield
Sustainability
Institute



POLITECNICO
MILANO 1863

www.vswarchitecture.com



Toronto is such a unique city. The core has so much history and it can be seen in its various styles of buildings. There's an origin for why every structure is the way it is. As we've developed we've adopted so many different styles of architecture throughout the decades, and at one point one of our own. This summary provides the history and purpose of why Toronto has no other city brushing close to its unique presentation.

The Settlement of Toronto

In the very early 17th century, French colonists stuck their claim on the land of the Iroquois and other tribes. In 1760, the British took claim to that domain and removed the French. In 1793, is when that land became the town of York, following years of development it became the city of Toronto in 1834.

An unfortunate fact about this city is that we have little in the way of historical structures due to massive fires. The Great Toronto Fire occurred on April 7, 1849 which consumed an extensive portion of the downtown area, including City Hall. The Great Toronto Fire of 1904 destroyed 118 buildings in the span of 8 hours. This tragedy was the biggest disaster in the history of the city, claiming a large portion of the downtown core. As a result, of all of the destruction and it's eventual turn into a megacity, the majority of Toronto consists of new buildings as we don't have the opportunity to hang on to the past.

Industrial Architecture

In the middle of the 19th century, the increasing railways and steamboat ports brought in an ever-increasing urbanization to a prominently green land from it's useful harbour. The increasing amount of trade began to develop into a massively increasing manufacturing industry. Along the shoreline we had kept expanding up until the mid 20th century. Our production plants were not limited to: refineries, soap factories, aviation plants and munitions facilities.

The History of Toronto Architecture





Due to the increasing population and the evolving world no longer needing use for much of the factories, the 1970s saw a decrease in their production. Corporations realized they could save money by utilizing overseas workers as it saves them exponentially due to lower pay rates. A massive deindustrialization began in Toronto, the factories were developed into offices, lofts or torn down making way for apartments and condos to develop into the Toronto we know today.

Residential Architecture

When settlements first began in the 1800's, builders adopted the Georgian style even though it was falling out of favour in both Britain and the United States at that time. Early settlers realized the practicality of having structures known to have strong durability. These were first made of log, then eventually clapboard, brick or stone. This style is known for symmetry, minute ornamentation and a wide structure. In the early 19th century, Victorian architecture began to take over due to its popularity in England and France at that time.

Characterized by its asymmetrical shape in its bays and wings, decorative trim and vibrant colours, his style had many different variations within it, including: Second Empire, Stick-Eastlake, Folk Victorian, Queen Anne, Richardsonian Romanesque and Shingle. Nearing the end of the 19th century, Toronto saw its own unique take on this style with bay-and-gable. It's noteworthy for its tall and narrow style and is often times semi-detached. This was to utilize smaller space with the constantly evolving rate of the population. These homes take influence of the Victorian style, but with tall windows and elongated depth. They were typically seen in The Annex area. This gave the middle-class more options to live in this budding city, while the typical Victorian homes were for the upper-class. The majority of homes utilized red bricks as that was the main product used to develop homes in Toronto. This was due to the type of clay that was utilized. Due to the prevalence of the bricks, it became common for households to adopt well after other construction options decades after other materials were readily available.

As development occurred, there was a strong incline in the growth of suburbs in the beginning of the 1950's. This was in large part due to the popularization of automobiles. It was then that the Green Belt Legislation was initialized in order to permanently preserve a vast amount of green space in Southern Ontario. In the 60s and 70s, there was a rapid increase in apartments and condominiums due in large part to the baby boom. There was such a vast increase of lower to middle class families. Unfortunately, this resulted in the destruction of a wide amount of Victorian homes in their wake. Gentrification began to rise in parts of the downtown core. As population continued to increase, the buildings took on the "towers in the park" concept from the bustling New York City. This was their traditional cityscape with enough space from the sidewalk, landscaping and other greenery.

The History of Toronto Architecture





As more and more people came into the city, it began to deindustrialize setting up increasing opportunities for people to move in. The 80s saw the initialization of the Ontario Condominium Act to regulate the booming market. The condo boom in the 1980s signified the rise of even more buildings, this increase in population continues to this day. As the population kept increasing, we continued to eliminate the industrial core and started developing properties near the financial district. We now have no option but to build up due to the Green Belt Legislation. In the 1990's, the increasing condo market took inspiration from Southeast Asian models as their population was rapidly increasing at the time as well, they understood how to format the buildings of exploding populations. We mostly have architectsAlliance, a Toronto-based firm, to thank for their continuous significant contributions to the condos of our skyline.

Institutional Architecture

As Toronto continued its prominence, it was determined that it would be the capital of Ontario. Between 1886–1892, the current Ontario Legislative Building was erected after the previous legislative assembly building had been destroyed back in 1813, during the Battle of York. During the time of the building's inception the Romanesque Revival was becoming increasingly popular. This style is characterized by its big, bold and chunky structure, with rounded archways and elaborate stone carvings similar to that of the Gothic style.

The City Council of Toronto was constantly overcrowded, in order to curb this a larger city hall had been decided. Completed in 1899, what we now call Old City Hall was the largest municipal building at the time. This structure was also made in the Romanesque Revival style. In 1965, they wanted to make a drastically different building that would stand out from the city's skyline, being the first significant modernist structure. These buildings are known for their sleek and minimalist designs, utilizing glass, concrete and steel. This design was chosen from a council of architects who chose from over 500 contenders, this design was decided upon as it was believed to represent civic government.

Our universities are prominent fixtures within the city, much of our character stems from these expansive campuses. The University of Toronto takes up a significant amount of space near the downtown core. Over the decades it has absorbed so many properties, therefore adopting a mishmash of architectural styles, mostly a blend of modernist, post-modernist and Victorian peppered throughout. York and Ryerson Universities are the other prominent post-secondary institutions in our city.

They were both constructed over 60 years ago when Brutalist architecture was at peak popularity.

The History of Toronto Architecture





The look is notable for its thick concrete with heavily muted colours and minimal detailing to appear uniform so they can house as many rooms possible. These solid structures still stand among the campuses, but as the universities flourish, new buildings are added with modernist designs breaking out of the traditional mould. Among the skyline of downtown Toronto, we have the exceptionally unique Ontario College of Art and Design built in 2002. The rectangular black and white structure is decorated with coloured beams descending to the floor. This eccentric piece, known as the “flying tabletop,” utilized for the main building was designed by William Alsop to portray how you can be unique and present your artistry when surrounded by uniformity.

The Royal Ontario Museum is a unique display as it is the best example of evolving architecture within the city. The over 100 year old building was conceived as a Romanesque Revival piece. The structure continued to expand as popularity and new wings were built. To not only capture attention but to encapsulate what the popular or unique architecture at the time was, it has elements of Gothic, Art Deco, Neo-Byzantine, Second Empire and Georgian architecture. It stands out more so than ever with its newest addition, a Deconstructivist postmodern wing of prismatic prominence.

The Art Gallery of Ontario (AGO) was established in 1918 under the Beaux-Arts style, French for “fine arts.” This Paris developed style was similar to that of Gothic conception, but utilizing iron and glass. The architects wanted this to appear unique due to the subject matter within the building. The AGO was eventually determined by its owners to look inaccessible to the general public due to its artistic representation, in order to counter that a brick wing was added in the 1990s. This was met exceptionally poorly as locals felt it looked cheap and bland. In 2008, world famous Toronto-born Frank Gehry redesigned the entirety of the gallery to look like an overturned canoe in a postmodern style.

The sky-piercing CN Tower was erected in 1976 and is the 9th largest free-standing structure on Earth. The skyscraper was conceived to not only serve as a telecommunications receiver, but also to portray the impressive scale of Canada. A Brutalist design was used so that the concrete would keep the massive structure stable, but so that visitors could enjoy the scope of the entire city with its wide use of tall windows.

The city of Toronto has an eclectic melting pot of architecture throughout. It’s wide use of concrete, but also ornately decorative structures provide a uniqueness that other cities don’t have. From it’s heavy use of Victorian architecture to it’s Brutalist landmarks, Toronto has a wholly unique blend of character.

The History of Toronto Architecture





A vibrant new design consciousness emerged in Canada after the II World War. At that time, this country was one of the world's largest manufacturing nations. Post-war consumer demand and federal government reconstruction policies combined to create opportunities for industrial designers. Good design became recognized by both the media and the public as a necessary and positive development, and the profession was legitimized via professional associations and educational initiatives. New materials like moulded plywood, plastic and aluminum profoundly changed the manufacturing landscape by permitting a single design to be mass-produced. Designers took on a myriad of roles that crossed disciplines like design, engineering, production and even marketing, engaging in unprecedented collaborations. The designers' exploration of the materials -while balancing the diverse conditions set by artistic, technical and economic concerns - resulted in innovative designs, a process that continues to this day. In the post-war world, a *Zeitgeist* called modernism dominated the cultural agenda. Industrial designers embraced the movement's tenets - functionalism and truth to materials - with gusto. Modernist pioneers like Jan Kuypers and Stefan Siwinski brought their European training to Canada, while others, such as James Donahue and Lawrie McIntosh, studied with transplanted Europeans at institutions like Harvard University and Chicago's Institute of Design. By the sixties, design training programs were established in Canada, allowing a second generation of designers like Thomas Lamb and Michel Dallaire to study at home. Although a cold climate and expansive spaces have contributed to design achievements in telecommunication, agricultural and transportation equipment, geography has rarely influenced the style of Canadian consumer goods. The best Canadian product designers approach their task from a global perspective.

The international marketplace was protected by various local tariffs, but a few enterprising companies like Surrar Industries (Douglas Ball), Clairtone Sound Corporation (Hugh Spencer, Al Faux and others) and C. P Petersen & Sons (Carl Poul Petersen) exported product design a tactic that with hindsight seems remarkable. As trade barriers around the world are now being lowered or eliminated, more Canadian companies are able to cultivate new worldwide markets.

Some designers have chosen artistic expression over mass production. Canada has a long legacy in studio manufacturing and a reputation for creating limited production designs with panache. By the eighties and nineties, advances in technology and processes made market-specific manufacturing economically feasible. This allowed some Canadian companies to exploit niches and others to lead entire industry sectors. Designers could create a variety of products in greater quantities with increased design content. Canadian design is now in its third wave, with each successive movement building on the achievements of its predecessors. New designers continue to grapple with international issues in this age of pluralism.

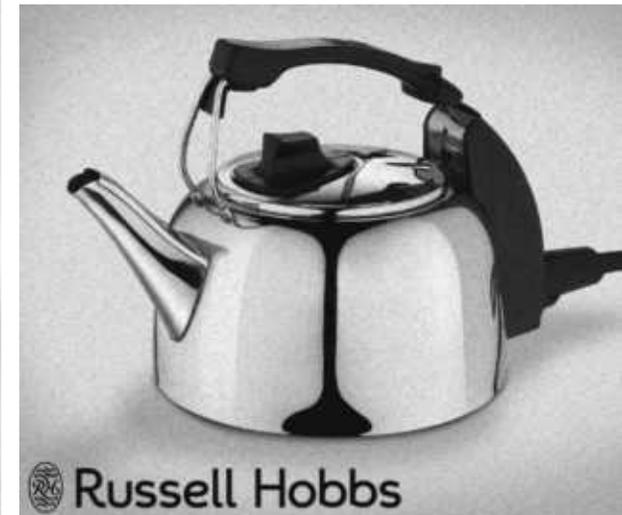
Preface of the book "Design in Canada"

Design in Canada



Design in Canada

Fifty Years from Teakettles to Task Chairs



Russell Hobbs



2023 IwB International Charrette Description

The charrette will focus on the theme of Smart Sustainability which grows from the intersection of wisdom and innovation and the application of digital transformation to help meet sustainable development goals. The projects have been selected to cover areas such as city planning, architecture and interior design, urban agriculture and heritage conservation and revitalization. The interdisciplinary teams will be working on actual projects that will then be developed into working prototypes after the charrette engaging with community groups, the College, developers, and corporate clients.

Current Project Descriptions:

Short Food Supply Chain Project

George Brown College will be creating a testing area for robotic and other urban agricultural gardening models. The team will design this urban agricultural test bed and develop a cuisine and interactive cooking app that will instruct people on how to create meals for a sustainable urban diet based on short food supply chains. As well ideas for balcony and or backyard urban agricultural growing systems will be developed.

Linear City Project

As our cities are faced with growing climate change challenges, how will they adapt to become sustainable. After the Roman period cities moved from the plains up to high locations for security and to avoid plague. This project will reimagine urban form that will supplant our current urban structures to be resilient especially if humanity is not able to solve the immediate climate change problem and if temperatures and water levels rise. The project will develop a new urban form taking inspiration from the award winning NobbyNet project developed by Loghman Azar.

Wooler Area Community Organization Project

Old buildings are part of the community and should not be torn down as preserving and conserving old buildings is a fundamental part of sustainable development. In the countryside in Ontario in the town of Wooler an old school and its site will be repurposed for community use. Imagine how one could adapt and revitalize a heritage building so it could operate sustainably and how digital programming and booking tools could bring a community centre to life for its inhabitants so that they could co-create its programming and co-run its operations sustainably.

Climate Positive Housing Development

Looking at rural, suburban and city sites imagine a new neighbourhood development of micro-homes with communal services and active transportation. Can we develop net carbon housing developments that make life affordable and offer new models for sustainable living for its inhabitants.

Chalk River Interpretative Centre

The site of Canada's oldest indigenous cabin and Canada's first nuclear complex Chalk River offers the opportunity to tell important stories about what it means to be both wise and innovative. The team will have to design the restoration and interpretative materials both physical and digital for the cabin and imagine small autonomous building modules that would complete the complex and tell the history of Canada's foray into atomic energy and how its continued use and innovation could help sustainability. Combining the old cabin and the new modules and the landscape they are in will create a site that speaks in a language of smart sustainability of our past, present and future.

Charrete details

- Over 150+ interdisciplinary participants in 12+ teams
- Over 20+ expert advisors and guest lectures
- Research, design events and site visits
- Presentations, discussion, and feedback

Charrete outcomes

The students will have the opportunity to learn new skills and have the following opportunities during the workshop events:

- working on timely social topics and the relationship of these to architecture and city building
- how architects can lead social change through systems thinking
- skills working in an interdisciplinary team including engineers, urban planners, landscape, architects, graphic designers, etc.
- work in a collaborative manner with students of many different design disciplines



Program - draft

day 1 – 21 feb. 2023 MILANO – TORONTO

Departure from Milan to Toronto

Arrival in Toronto. After the security checks and taking your luggage, we will go to our hotel



day 2 – 22 feb. 2023 TORONTO

09:00 am - Financial district Tour:

- City Hall, 1958-65 Viljo Revell with John B. Parkin Associates
- Street East il modo migliore per avere un'idea del quartiere della spiaggia).
- Bay Adelaide Centre, 2007-09 WZMH
- Toronto Dominion Centre, 1963-69 Ludwig Mies van der Rohe with John B. Parkin Associates, Bregman & Hamann Architects
- First Canadian Place, 1972-77 Edward Durell Stone Associates with Bregman & Hamann Architects
- former Toronto Stock Exchange, 1936-37 George & Moorhouse with S.H. Maw; renovated as Design Exchange, 1994 KPMB
- Scotia Plaza, 1985-88 WZMH
- Commerce Court, 1968-72 I. M. Pei & Partners with Page & Steele; 1994 renovation Zeidler Roberts Partnership
- One King West, 2006 Stanford Downey Architects
- Prudential Building, 1958 Peter Dickinson
- Brookfield Place, 1989-91 Bregman & Hamann Architects with Skidmore Owings & Merrill; galleria 1987-92 Santiago Calatrava
- St. Lawrence Market

04:30 pm – meeting with K.P.M.B. Architects

06:30 pm – visit of Art Gallery of Ontario



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day 3 – 23 feb. 2023 TORONTO

09:00 am – University of Toronto campus Tour:

- Gardiner Museum of Ceramic Art, 2003-06 KPMB (original building 1984 Keith Wagland)
- Telus Centre for Performance and Learning, Royal Conservatory of Music, 2005-08 KPMB Architects
- Bata Shoe Museum, 1995 Moriyama & Teshima Architects
- Max Gluskin House, 2008 Hariri Pontarini Architects
- John P. Robarts Reference Library, 1968-73 Warner Burns Toan & Lunde with Mathers & Haldenby
- Rotman Expansion, 2010-2012 KPMB Architects
- St. George Street Revitalization, 1996-97 Brown and Storey Architects in joint venture with van Nostrand DiCastrì Architects
- Terrence Donnelly Centre for Cellular and Biomolecular Research, 2005 Behnisch, Behnisch & Partner with architectsAlliance
- Leslie L. Dan Pharmacy Building, 2002-2006 Foster + Partners with Moffatt Kinoshita Architects
- Royal Ontario Museum, 2003-08 addition by Daniel Libeskind with B+H Architects

Meeting with Prof. Mark Sterling (Director, Master of Urban Design at University of Toronto)

06:00 pm – Event Launch, students meet their teams at Brookfield Sustainability Institute of George Brown College (3 Lower Jarvis, Toronto Ontario)



Program - draft

day 4/5/6 – 24 to 26 Feb. 2023

TORONTO

Full working days at Brookfield Sustainability Institute of George Brown College (3 Lower Jarvis, Toronto Ontario)



Schedule:

- 09:00am – 12:30 pm Work period
- 12:30pm – 1:30 pm Lunch
- 01:30pm – 4:30 pm Work period
- 04:30pm – 6:00 pm **Advisors session**
- 06:30pm – 07:00pm Dinner
- 07:00pm – 11:00pm Work period

day 7 – 27 Feb. 2023

TORONTO

Full working days at Brookfield Sustainability Institute of George Brown College (3 Lower Jarvis, Toronto Ontario)

1.00pm to 5.00pm – Final presentations followed by a celebration and acknowledgments

day 8 – 28 Feb. 2023

TORONTO - MILANO

08:00am – departure to Niagara on the Lake, Jackson Triggs Winery (KPMB Architects, the first design winery in Canada) and Niagara Falls.

04:00pm – Arrival at Toronto Pearson International Airport

Departure to Milan



day 9 – 01 Mar. 2023

MILAN

Arrival in Milan



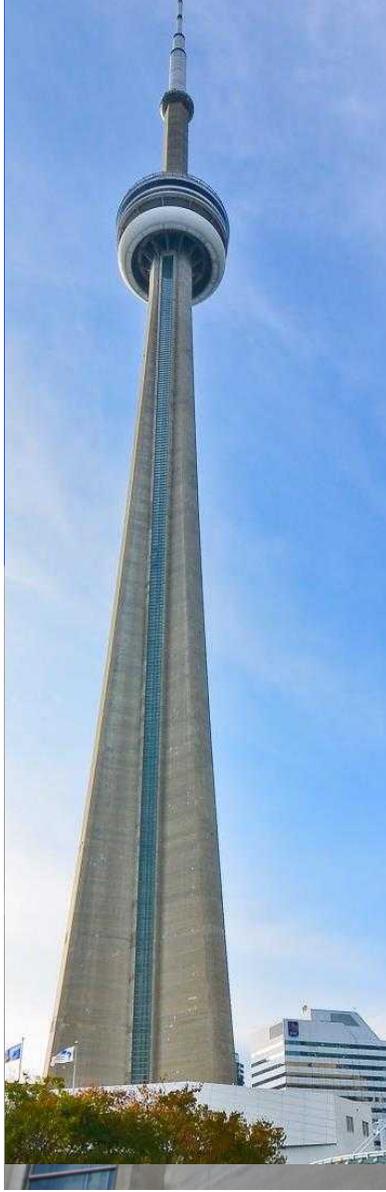
Brookfield Sustainability Institute



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International Charrette, **TORONTO**, 2023





INFORMATIONS and COSTS OF PARTICIPATION

The estimated cost for the workshop participation is

euro 1485,00

(The cost will be confirmed at the time of the final payment due to the Euro-Canadian Dollar exchange rate, airport taxes/fuel surcharges)

The fee includes:

- intercontinental flights tickets, checked baggage included
- 7 overnights in hotel, room for 4 people (2 double bed), including breakfast & WIFI
- transfers from / to the airport
- travel medical insurance
- participation at the workshop (*studio supplies, program fees, keynote lectures, five lunches, opening and closing receptions*)
- participation certificate
- excursions to Niagara region with the visit of Jackson Triggs Winery
- 12 tickets of public transportation

The fee does not include

- Anything not expressly indicated in the fee includes: meals not indicated in the programme; personal extras; optional excursions, ecc....

INFO:

- **School of Architecture:** Prof. Luca Maria Francesco Fabris
lucamariafrancesco.fabris@polimi.it
- **School of Design:** RELÈ Office
rele@polimi.it
- **George Brown College:** arch. Marco Grassi
vswa.info@gmail.com



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TERMS AND CONDITIONS

The following terms and conditions apply to the relationship between the organizer and the contractor. These terms must be understood as read and accepted at the time of travel confirmation and are an indivisible part of the travel estimate which is accepted in its entirety and which you declare to have read and understood in all its parts, accepting the services included and those excluded from the travel quote.

TERMS OF PAYMENT

To confirm participation in the Charette, a deposit of 565.00 euros is required to be paid by 23rd December 2022 by bank transfer to the account that will be indicated in the participation confirmation letter. The balance of the trip must be paid in the same way on 22 January 2023.

TERMS OF CANCELLATION

All cancellation requests must be sent by email. The amount of the cancellation (*for any kind of reasons*) costs varies according to the moment in which it occurs:

- From registration to 40 days from departure: 350,00 euros
- Between 39 and 20 days before departure: 50% of the cost of participation
- Between 19 and 11 days before departure: 75% of the cost of participation
- Less than 10 days before departure: 100% of the cost of participation

Please note - international student who require a VISA to go in Canada: due to the complications of obtaining a visa to go in Canada, the cancellation fee is 350,00 euros up to 10 days before departure. From 9 days to the day before departure, the cancellation fee is 800,00 euros.

TERMS OF PAYMENT:

The deposit must be paid by **22° DECEMBER 2022**
The balance must be paid by **20° JANUARY 2023**

Please note - important information for visiting Canada:

due to the complications of obtaining a visa, it is recommended that international students requiring a visa for Canada carefully check the conditions imposed by the Government of Canada. Find out if you need a visa to travel to Canada for **tourism** at the following link: <https://www.cic.gc.ca/english/visit/visas.asp>

If you are a student from the European Union, You need an Electronic Travel Authorization (eTA):
<https://www.canada.ca/en/immigration-refugees-citizenship/services/visit-canada/eta/apply.html>



Entries BY 22nd December 2022

Application form

24 places are available for POLIMI students



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Please, you have to send the application form to:

Prof. Luca Maria Francesco Fabris - lucamariafrancesco.fabris@polimi.it

arch. Marco Grassi - vswa.info@gmail.com

Nome / name:

Cognome / family name:

Matricola n°:

Codice fiscale / Italian tax code:.....

Data nascita / date of birth:

genere / gender:

E-mail:

nazionalità / nationality:

cellulare/ mobile ph.:

passaporto / passport n°.....

scadenza/valid till:

Indirizzo / address:

Città/City

Cap/zip.....

Autorizzazione allo scambio di indirizzi e-mail tra i partecipanti e partecipazione al gruppo WhatsApp del viaggio / *Authorization to exchange e-mail addresses between participants and participation in the trip's WhatsApp group :*

sì no

Il Contraente dichiara di aver preso visione del presente contratto, composto dal Programma di Viaggio, dalle Condizioni Generali di vendita e dalla presente Richiesta di Prenotazione e di accettarlo e approvarlo / *The Contractor declares to have read this contract, made up of the Travel Program, the General Conditions of Sale and this Booking Request and to accept and approve it.*

Data / date firma / signature

LIBERATORIA / STATEMENT

Dichiaro di aver preso visione del programma e di accettare le condizioni generali d'iscrizione al workshop, chiedo l'iscrizione al viaggio, avendo debitamente compilato il modulo d'iscrizione. **Controllate "cancellazioni e penali".**

I declare that I have read the program and accept the general conditions of registration for the workshop, I request registration for the trip, having duly completed the registration form. Check "cancellations and penalties".

Data / date firma / signature

Dichiaro di assumere ogni responsabilità riguardo la mia persona e di sollevare la segreteria organizzativa e i direttori da ogni responsabilità per eventuali danni inflitti a cose e/o persone.

I declare to assume all responsibility regarding my person and to relieve the organizational secretariat and the Universities of any responsibility for any damage inflicted on things and/or people.

Data / date firma / signature

Dichiaro inoltre il mio consenso all'utilizzo dei miei dati personali per attività strettamente connesse all'organizzazione del viaggio ai sensi del Decreto Legislativo 196/2003 e GDPR UE 2016/679 sulla tutela dei dati personali.

I declare my consent to the use of my personal data for activities strictly connected to travel organization pursuant to Legislative Decree 196/2003 and EU GDPR 2016/679 on the protection of personal data.

Data / date firma / signature



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welcome | **Bienvenue** | bem-vindo | Добро пожаловат |
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