WHEN?
1st August - 12th August 2022

WHERE?
West University of Timisoara (onsite)

APPLICATION
Apply here

Fees and Deadline
This year's application fee will be 50 EURO per person. The application deadline is the 1st of July 2022.
WHAT ARE WE OFFERING

- Two weeks of unique, interesting courses in various subject areas;
- Workshops on a variety of topics, perfect for improving personal skills, such as: Public Speaking, Introduction to Romanian Language, or Critical Thinking;
- A plethora of fun extracurricular activities to better get to know each other's cultures, the city of Timisoara and its surroundings, etc.
- Accommodation, lunches throughout the stay, promo kits etc.

WHO CAN APPLY?

All students are welcome, national or international, Bachelor or Master level, for the 70 places available.

COURSES

- Astrophysics and cosmology. The history of the universe
- A cultural history of English words
- Bitcoin & Ethereum Decentralized Models
- Getting to grips with online streaming
- Piano is for everyone
- Sustainable finance - a gaming approach
- Timisoara's transformations in the city. Cultural heritage, demographic shifts and smart city resilience solutions
- Physical activities and teambuilding
- Quantum Chemistry by Path Integrals
- Basics in climatology, paleoclimatology and climate change
<table>
<thead>
<tr>
<th>1. <strong>ASTROPHYSICS AND COSMOLOGY. THE HISTORY OF THE UNIVERSE</strong></th>
<th>Topics: The thing and the sign topic, Semiotics and Plato's philosophy, What is etymology? Methods and principles of etymology, Borrowed words. A cultural history. Semantics and change of meaning, The origin of earliest words and ancient roots, Sound and symbolism and folk etymology, Words' histories illustrated, a cultural history</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. <strong>A CULTURAL HISTORY OF ENGLISH WORDS</strong></td>
<td>Topics: The thing and the sign topic, Semiotics and Plato's philosophy, What is etymology? Methods and principles of etymology, Borrowed words. A cultural history. Semantics and change of meaning, The origin of earliest words and ancient roots, Sound and symbolism and folk etymology, Words' histories illustrated, a cultural history</td>
</tr>
<tr>
<td>3. <strong>BITCOIN &amp; ETHEREUM DECENTRALIZED MODELS</strong></td>
<td>The course aims to introduce Blockchain technology with a focus on Bitcoin and Ethereum protocols that have the ability to revolutionize financial systems, distribution network management, voting mechanisms, digital identity and much more. Graduates of this course will have a clear understanding of how this technology allows the implementation of decentralized, open, censorship-resistant, borderless networks.</td>
</tr>
<tr>
<td>4. <strong>GETTING TO GRIPS WITH ONLINE STREAMING</strong></td>
<td>An intro to online streaming. Whatever your platform of choice (Twitch, YouTube, Facebook, Google Meet), learn to get the most out of your content. Get the basics on camera selection, lighting, streaming software and everything else in between.</td>
</tr>
<tr>
<td>5. <strong>PIANO IS FOR EVERYONE</strong></td>
<td>Playing the piano has been shown to be a great choice for those who seek fun, joy and creative expression. The course „Piano is for everyone“ is providing a relaxed, creative and encouraging piano lesson experience for beginners. Piano playing will offer different physiological and physical advantages to the participants. So, lessons will be tailored to the interests and level of the participants. The course is designed for 8 students. Every student will have 30 minutes of mixed class (theoretical and practical principles of piano playing) or piano lessons / per day. At the end of the course, the students will be able to play at least 1 song.</td>
</tr>
<tr>
<td>6. <strong>PHYSICAL ACTIVITIES AND TEAMBUILDING</strong></td>
<td>Physical activities that can increase the individuals abilities to work in teams and developing communication, social and intercultural skills.</td>
</tr>
</tbody>
</table>
### 7. Sustainable Finance - A Gaming Approach

The topic is of utmost importance in the context of changing paradigms toward the green economy. The subject is built following three tiers: investments in the capital market, sustainable banking and greening the government budget. The topic is approached using games and case studies.

### 8. Timisoara’s Transformations in the City. Cultural Heritage, Demographic Shifts and Smart City Resilience Solutions

Students will learn about the social and cultural context and the everyday life of the Timisoara’s inhabitants. Together with the teacher, the students will be involved in fieldwork activities and onsite visits, will use social research visual methods and instruments (participatory observation, transect walks and social mapping), and will reflect on the various urban development scenarios for Timisoara. Through this experiential learning setting (learning by doing), students will practice and develop transversal competencies with the potential to increase their employability: social skills, teamwork in transnational learning groups, communication and collaboration skills, cultural understanding of the multi-, inter- and trans-cultural urban environment, and community needs oriented.

### 9. Quantum Chemistry by Path Integrals

**Part 1:** Quantum Assessment for Atomic Stability: the alternative (to Heisenberg-Schrödinger) quantum mechanical description of total energy given by path integrals specialised to Feynman-Kleinert formalism, while recovering the Bohr quantification of Hydrogen(ic) atom(ic) prototype, is presented, yet within a more general framework in which the stability issue is solved by existing quantum fluctuation, here explicitly by periodic paths and Matsubara frequencies; both ground and exited states are treated in quantum statistical perspective.

**Part 2:** Quantum Nature of The Chemical Bond: Valence, Orbitals and Bondons: The classical quantum methods in characterising chemical bonding. Then, the “missing link” in characterising chemical bonding field by its associated quantum particle, the bondon, is revealed by employing the combined Bohmian quantum formalism within the Schrödinger quantum picture of electron motions so resulting in specific bondonic-mass, -velocity, -charge, and -life-time; the mass-velocity-charge-time quaternionic properties of bondons’ particles are finally used in discussing various types of chemical bond towards assessing their covalent, multiple bonding, metallic and ionic features.

### 10. Basics in Climatology, Paleoclimatology and Climate Change

The proposed course covers the basic concepts in climatology aiming to a better understanding of recent climate change. In the first part, generic factors of Earth’s climate will be discussed, such as atmosphere and ocean properties, solar radiation, precipitation, influence of latitude and elevation, ending with a brief description of the main climate zones. Secondly, basic concepts of paleoclimatology will create the context for approaching the climate change discussion. In this section, several paleoclimatological methods will be detailed, such as tree-rings and stable isotope analyses. Finally, present global warming and climate change will be explained in terms of evidence, causes, effects and solutions.