

3-4 . 10 . 2024

**ATI** CONFERENCE

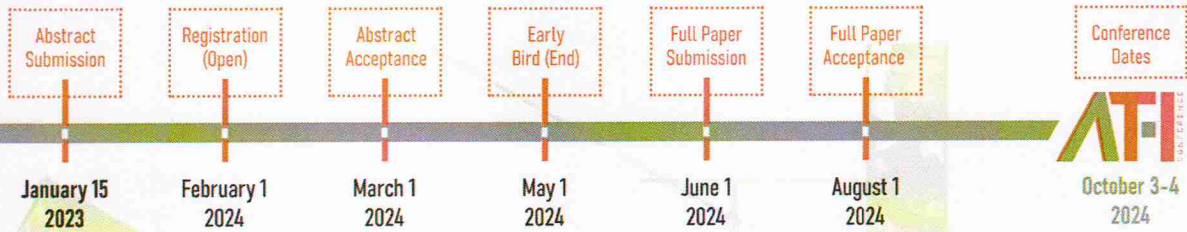
ARCHITECTURE TECHNOLOGY INNOVATION



**YASAR UNIVERSITY**  
Faculty of Architecture / Department of Architecture







## INTRODUCTION

Technology has always been pivotal in shaping society. Advances in information technologies and material sciences in the course of the 21st century have irreversibly altered not only everyday life of individuals and the structural tenets of societies, but also the design, construction and management methods in architectural, engineering and urban practices. Beyond these alterations, recent innovations in emergent technologies such as Internet of Things (IoT) and/or Machine Learning have started to define unprecedented needs and requirements for the built environment. Moreover, environmental problems like pollution, material scarcity, source limitations, overcrowded cities, climate change, extreme weather conditions, and the social crises they cause on the doorstep require each and every profession to rethink its role in the ever-changing conditions of today's dynamic political and economic agenda. Technology is a tool in the hands of architects, engineers, builders, planners, designers, and managers who must make urgent decisions to adapt their knowledge and skills to take immediate actions. Cutting edge technological developments and innovations have the potential of being both remedy and poison for these environmental, economic and social upheavals.

## WHAT IS ATI?

In order to give insights into the role of technology and innovation in the practice and critical theory of contemporary architecture, Yaşar University Department of Architecture initiated in 2020 the International Symposium on Architecture, Technology and Innovation (ATI), which was organized annually until 2022. The symposium will be organized as an international conference in 2024, with the aim of providing scholars with a transdisciplinary platform where theoretical, technical, practice-based, and state-of-the-art research findings revolving around five main themes can be discussed reciprocally. The ATI2024 Conference addresses the use of innovative technologies in architectural design and education, through the following main themes: Production, Design and practice, Building science and technology, Community, space and culture; and, Education.

## PUBLICATION OPPORTUNITIES

In line with the main themes of the ATI2024 Conference (Production, Design and practice, Building science and technology, Community, space and culture; and Education), we have new journal opportunities for offering to authors.

The authors of selected papers will be invited to prepare an improved manuscript, to be submitted to:

- Architecture Civil Engineering Environment (ACEE) Journal  
[indexed in ESCI (Web of Science)] <https://acee-journal.pl/>
- VITRUVIO - International Journal of Architectural Technology and Sustainability  
[indexed in ESCI (Web of Science), Scopus] <https://polipapers.upv.es/index.php/vitruvio/index>
- Mehran University Research Journal of Engineering and Technology\*  
[indexed in ESCI (Web of Science), DOAJ] <https://publications.muet.edu.pk/index.php/muetrj>
- New Design Ideas\*  
[indexed in Scopus] <http://jomardpublishing.com/journals.aspx?lang=en&id=10>
- Journal of Architectural Sciences and Applications  
[indexed in TR Dizin, EBSCO, DOAJ], <https://dergipark.org.tr/en/pub/mbud>
- UOU Scientific Journal / Issue # 8 Radical futures  
[indexed in SHERPA/RoMEO, DOAJ, Dialnet], <https://revistes.ua.es/uou/index>

-Final publication is subject to a successful peer-review, conducted by each journal

-\*Journal asks for a publication fee (APC). Reductions may apply if there is a significant number of papers submitted from the ATI conference.

-All abstracts will be published in the ATI2024 Conference Proceedings, which includes an ISBN.



## THEMES

Call for papers – The ATI2024 Conference addresses the use of innovative technologies in architectural design and education, through the themes and topics listed below. Scholars and researchers are invited to submit abstracts, using the link provided at the bottom of this page, before or up to December 15, 2023. Abstracts should be submitted using the ATI template, which can be downloaded from the link provided below.



### PRODUCTION

This theme encompasses topics related to the innovative processes of contemporary architectural production. This theme includes, but not limited to:

Digital technologies in architectural production, Digital fabrication, Robotic fabrication, Additive manufacturing, Robotics and automation  
Deconstruction & disassembly, Reuse, Prefabrication, Modular constructions, Construction Management  
Structures, Lightweight structures, Structural form-finding, Structural morphology  
Temporary architecture, Prototyping, Emergency Architecture, Pop-Up structures  
Sustainable construction, Natural materials, Timber construction, Renewable building materials, Low-tech architecture  
Responsive facade, Kinetic structures, Adaptive structures, Smart materials  
Adaptive Building Systems, Building Envelopes



### DESIGN AND PRACTICE

This theme focuses on cutting-edge and innovative technologies in architectural design and practice, encompassing interdisciplinary approaches. This theme includes, but not limited to:

Digital design, Parametric design, Computer-aided design, Building information modelling  
Artificial intelligence, Machine learning, VR/AR/XR in Architecture  
Interdisciplinary practices, Holistic design, Design collaboration, Co-design  
Design for disassembly, Sustainable practices, Circular projects, Circularity in the built environment, Resilient design  
Biophilic design, Biodesign, Ecology in architecture, Biomimetics, Multispecies cohabitation  
Design tools and technology, Topology optimization, Algorithms, Data-driven design  
Smart Applications in Architecture, Internet of Things



### BUILDING SCIENCE AND TECHNOLOGY

This theme revolves around emerging and state-of-the-art building science and construction technologies. This theme includes, but not limited to:

Building envelopes, Facade design  
Energy efficiency, Environmental performance, Building performance, Performance-based design, Daylight Optimization  
Building physics, Thermal comfort, Indoor environmental quality, Acoustics, Lighting  
Green buildings, Bioclimatic architecture, Regenerative design  
Environmental impact of construction and operation of buildings, Life cycle assessment  
Building refurbishment, Retrofitting of buildings, Restoration



### COMMUNITY, SPACE AND CULTURE

This theme includes, but not limited to the topics on the effects of advances in technologies on community, space and culture in a variety of scales, such as:

Micro living, Housing projects, Social housing, Interior architecture  
Emergency architecture, Disaster resilience, Resilient housing, Earthquake architecture  
Public space, Urban design, Urban ecology, Resilient cities, Urban health, Smart cities  
Space and digital culture, Spatial justice, Spatiality and technology  
History and theory of technology in architecture, Techno-aesthetics, Tectonics  
Augmented and virtual reality, Digital media, Technological representations of space  
Urban archeology, Cultural heritage, Adaptive reuse



### EDUCATION

This theme enquires into the future of architectural education and the role of technology in shaping pedagogy. This theme includes, but not limited to:

Digital learning, Digital technologies, Gamification, Human-computer interaction, Ethical use of AI  
Sustainable practices, Interdisciplinary approaches, Research practices, Cross-cultural approaches  
Design cognition, Design education, Design process, Design research  
Learning spaces, Situated learning, Design thinking methodologies, Experiential learning, Cognitive development  
Assessment and evaluation methods, Curriculum development





## REGISTRATION

### IN-PERSON PRESENTATION

	Registration before or up to May 1, 2024	Registration after May 1, 2024
Standard Fee	€ 125	€ 150
Student Fee*	€ 75	€ 100
Turkish Standard Fee	₺1.500	₺1.750
Turkish Student Fee*	₺500	₺750

\* Proof document is required

### ONLINE PRESENTATION

	Registration before or up to May 1, 2024	Registration after May 1, 2024
Standard ONLINE Fee	€ 100	€ 125
Student ONLINE Fee*	€ 50	€ 75
Turkish Standard ONLINE Fee	₺1.250	₺1.500
Turkish Student ONLINE Fee*	₺250	₺500

\* Proof document is required

Registration opens on February 1, 2024

Early bird registration finishes on May 1, 2024

**Note:** The registration fee covers the participation of one author per accepted paper.

If other authors would like to join the conference, they must pay separate fees.



Author/Co-Author Registration Fee Includes:

- Welcome reception
- A Conference Delegate ID Card
- Coffee breaks + Lunch (on the day of presentation)
- A Conference Bag (with folders, booklets, note pads, pens, and more)
- Certificates for author and co-authors (per paper)
- Networking events to connect with other authors
- The chance to attend both online and in-person sessions of the entire conference
- The double-blind peer-review process for evaluating accepted papers for possible publication opportunities
- All the accepted full papers will be published in the Proceedings as online with an ISBN number

## TRIP TO EPHEBUS



As part of the ATI Conference, there is a planned trip to Ephesus archaeological site and Ephesus Museum, following the completion of the sessions. Further details on transportation and costs will be announced later on, however the trip is expected to take place on **Saturday October 5, 2024**.

Ephesus, included in the World Heritage List in 2015, is a World Heritage Site consisting of four components: Çukuriçi Mound, Ayasuluk Hill (Selçuk Castle, St. John's Basilica, İsa Bey Bath, İsa Bey Mosque, Artemision), the Ancient City of Ephesus, and the House of the Virgin Mary.

Ephesus, one of the most significant centers of the ancient era, was continuously inhabited for approximately 9000 years, starting from prehistoric times and spanning the Hellenistic, Roman, Eastern Roman, Beylik (Principalities), and Ottoman periods. Throughout its history, Ephesus has been a highly important port city and a cultural and commercial center.

ARCH.YU

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MİMARLIK FAKÜLTESİ

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