

Classroom Of The Future

How would the classroom of the future look like?

Imagine a revolutionary design concept for the classroom of the future, tailored to meet the challenges and harness the potential of advancements in technology and artificial intelligence. Such an environment would be instrumental in preparing students for an ever-changing digital world.



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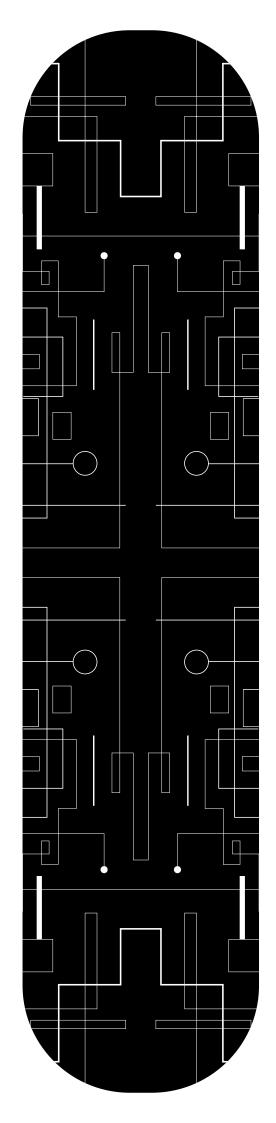
Description

In this visionary classroom, participants are encouraged to develop a space that not only leverages cutting-edge technology but also promotes interactive and immersive learning experiences. The design should thoughtfully consider ergonomics and adaptability changes, ensuring that the environment is inclusive and comfortable for all students. Innovative use of space is paramount, aiming to create a setting that is conducive to contemporary educational needs while addressing the implications of emerging technologies.

As we envision these futuristic classrooms, it is worth contemplating the fate of traditional education.

- -Will traditional classrooms, with their conventional methods and setups, disappear entirely?
- -How can we preserve the valuable aspects of traditional education, or should we even aim to preserve them?
- -What is the role of architecture in learning process and how it needs to cope with this technological advancement?

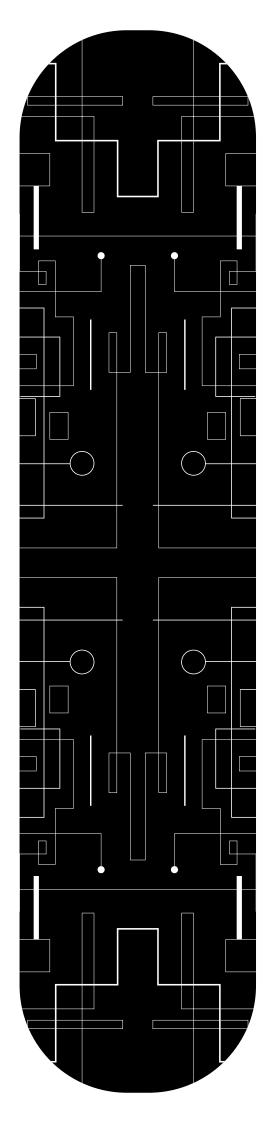
In the face of rapid technological advancement, these questions become increasingly pertinent. Balancing the integration of new technologies with the preservation of effective traditional teaching methods could be the key to a well-rounded educational future.



Context

The challenge is to design a Classroom in an imaginary space. There are no restrictions to the hypothetical context and site. However, Participants are required to fit their design proposal in an area that does not exceed 50m² as the total built-up area, with no minimum footprint percentage!

- The surrounding environment is disregarded in this context.
- Participants can divide the space with walls or partitions or leave it as an open space.
- The space can be imagined as both indoor, outdoor or hybrid.
- No restrictions are applied to the height or number of floors as long as the total builtup area does not exceed 50m².
- · There is no specific budget.
- The classroom can be mobile, and can be assembled and disassembled in various locations such as parks, rooftops, forests, beaches, or even the Meta-verse.
- There is no specific age group.
 Participants can propose age group (e.g. kindergarten, primary school students, secondary school students, high school students, university students, mix of 2 or more groups, or keep it general and adaptive to different age groups). However, participants are requested to highlight the target group in the project description.



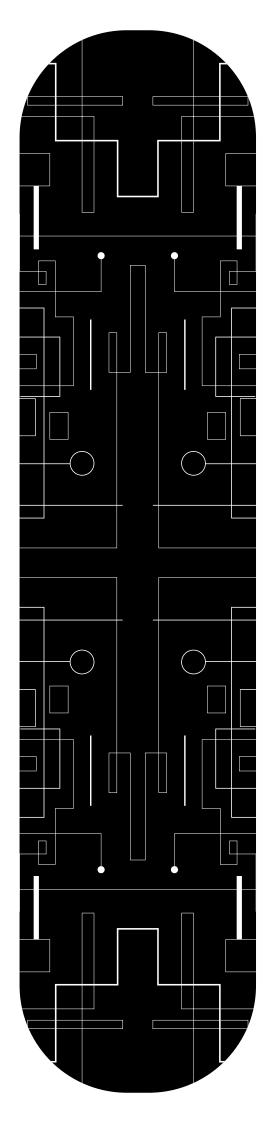
Competition Tracks

Participants are tasked with designing a futuristic classroom that leverages technology, promotes interactive learning, and addresses the challenges and potentials posed by AI advancements. The design should consider aspects such as ergonomics and innovative use of space to create an environment conducive to modern education while coping with the implications of emerging technologies. Accordingly, there two tracks that participants can choose one or both:

OT Architecture and Interior Design Track.

O2Product Design

(Furniture Piece Design)



Architecture and Interior Design Track:

- **Focus:** Architectural layout, interior design, spatial planning, and technology integration.
- The number of students can differ according to the spatial layout and design concept, with minimum (2m² per student).

• Submission Deliverables:

- 1. Floor plan/s (Scale 1:50)
- 2. Minimum two 3D renderings (One of them will be

submitted separately in High Quality)

- 3. One Section (Scale 1:50)
- 4. Design Concept Diagrams, including technology integration diagrams

Evaluation Criteria:

- Requirements Fulfillment
- Design Concept: Originality and creativity.
- Technology Integration, traditional education, or mix of both?
- Ergonomics: Comfort, inclusivity.
- Aesthetics and Spatial Planning: Functionality, usability, visual appeal, spatial efficiency.
- Submission Quality: Quality of line-work, Clarity, details, presentation.

Paper Format:

Piece Design (Furniture Piece Design)

- **Focus:** Designing furniture that enhances the learning experience.
- Designing furniture for a "classroom of the future," where technology and AI are integral, would require innovative and multi-functional pieces. Here's a list of furniture pieces that could be considered (below are only suggestions, participants can come up with another pieces, traditional or innovated):
- Traditional, Smart, or hybrid Desks
- Modular Seating Systems
- AR/VR Learning Pods
- Collaborative Workstations
- Traditional, Interactive, or hybrid Whiteboards
- Charging Stations/Smart Storage
- Adaptive Lighting Solutions
- · Sound-Controlling Partitions
- Personalized Learning Chairs
- Holodeck-style, traditional, or hybrid Learning Spaces
- Traditional, Al-Guided, or hybrid Teacher's Console
- Telepresence Units
- · Sustainable, Energy-Harvesting Furniture
- Traditional, AI-Powered, or hybrid Bookcases
- Sensory-Responsive Walls and Floors
- Storage Cabinets
- Traditional, Al-Powered, or hybrid Bulletin Boards
- Classroom Rugs or Carpets
- Audio-Visual Equipment Stand or Cart
- Teacher's Podium, or... Is there any teacher?
- Lockers
- Student Work Display Boards
- Trash Bins
- Recycling Bins
- Reading Nook Furniture (e.g., bean bags, soft chairs)

Product Design (Furniture Piece Design)

• Submission Deliverables:

- Detailed furniture drawings (2 Side Views, 1 Top View, 1 Section) Scale 1:10 each
- 2. Minimum two 3D renderings of the furniture piece (One of them will be submitted separately in High Quality)
- 3. Design Concept Diagrams, including technology integration diagrams and Material specifications

• Evaluation Criteria:

- Requirements Fulfillment
- Design Concept: Originality and relevance.
- Ergonomics: Comfort, adjustability.
- Functionality: Practicality, ease of use.
- Innovation and Technology Integration: Smart features, adaptability.
- Submission Quality: Quality of line-work, Clarity, detail, presentation.

Paper Format:

One Al Panel (Portrait or Landscape)

Imaginary Scenario [Design Hints]:

Below are some features and components of such a classroom. It might be helpful for one track or the other. The following features are NOT "Design Requirements". They are "Useful Hints and Imaginary Design Scenario". Feel free to tailor them according to the specific needs of your proposal!

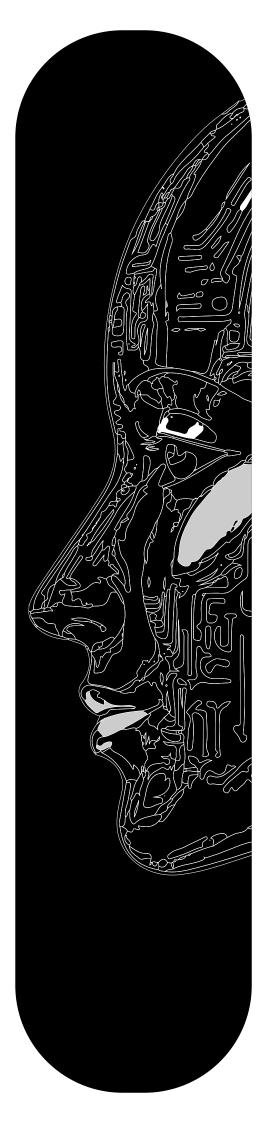
Creating classroom design while considering future changes with AI and technology integration requires a forward-thinking approach. Here's a plan to achieve this:

Architecture and Interior Design

Reconfigurable structures for adaptability: Movable walls, foldable furniture, and modular components.

Seamless Technology Integration:

- Classrooms equipped with high-speed Internet, ample power outlets, and wireless charging stations to support various devices and AI tools.
- IoT Integration: Internet of Things (IoT)
 devices for smart control of lighting,
 climate, and other environmental factors,
 which can be managed through AI
 systems in the future.
- Interactive Displays: Interactive
 whiteboards or touchscreens that can
 connect with Al-driven educational
 software, allowing for dynamic lesson
 delivery.



- Space designed to accommodate AR and VR technologies, which can be pivotal for immersive learning experiences in the future.
- Teachers might be robots / human / hybrid / holograms.

Lighting Design:

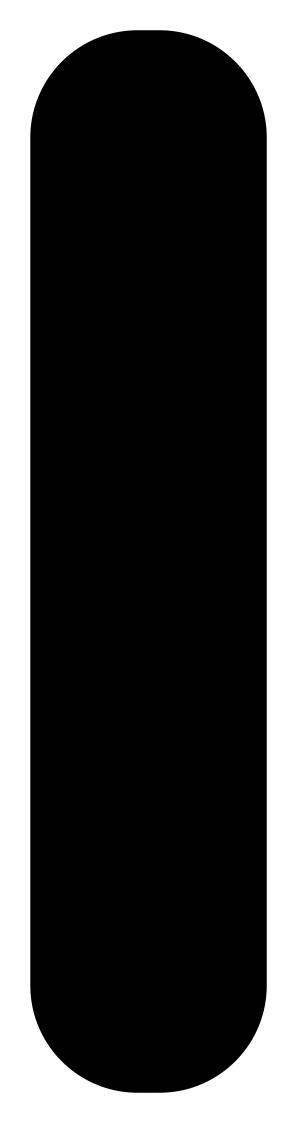
- Natural lighting complemented by adjustable artificial lighting to reduce eye strain and improve focus.
- Smart lighting systems that adjust based on time of day and activity.
- Comfortable and aesthetic environments foster a pleasant learning atmosphere.
- Use of colors and materials that enhance focus and creativity.
- Integration of smart HVAC System

Prioritize Inclusivity:

 A design which is adequate for students with disabilities. This includes adjustable desks, and tactile pathways.

Spatial Planning:

- Zones for different types of learning: individual study, group work, presentations, virtual learning experiences, and interactive sessions.
- Quiet zones for concentration and relaxation areas for breaks.



Components Design (e.g. walls, partitions, furniture, ceiling, floor, etc.):

- Ergonomic and adjustable elements.
- Smart components with built-in charging ports and interactive features.
- Components are designed to support proper posture and reduce physical strain.
- Adjustable components to cater to different body types and ages.
- Components that can support current and future technological needs. Include features like integrated screens, wireless charging pads, and connectivity ports.

Material Choices:

- Sustainable, Eco-friendly materials that are durable and easy to maintain.
- Acoustic materials to manage noise levels and create a conducive learning environment.
- Think about how materials can also contribute to the overall aesthetic and functionality.

Innovation:

- Integration of technology such as smart desks with built-in screens, wireless charging, and connectivity options.
- Interactive elements like touchscreens or modular parts that can be reconfigured.

User-Friendly Design:

- Furniture that is engaging and fun to use, encouraging interaction and active learning.
- Bright, inviting colors and playful shapes.





2. Product Design Track

Can the following features be integrated in the furniture piece?!

Ergonomic:

- Furniture adaptable for different types
 of learning: individual study, group work,
 presentations, virtual learning experiences,
 and interactive sessions.
- Adjustable furniture to suit students of various ages and sizes.
- Furniture is designed to support proper posture and reduce physical strain.
- A design which is adequate for students with disabilities (e.g. adjustable desks)
- Furniture that is engaging and fun to use, encouraging interaction and active learning.

Technology integration:

- Smart furniture with built-in charging ports and interactive features.
- Integration of technology such as smart desks with built-in screens, wireless charging, wireless charging pads, and connectivity options. Interactive elements like touchscreens or modular parts that can be reconfigured.
- Furniture equipped with high-speed
 Internet, ample power outlets, and wireless
 charging stations to support various
 devices and AI tools.



- Interactive Displays: Interactive
 whiteboards or touchscreens that can
 connect with Al-driven educational
 software, allowing for dynamic lesson
 delivery.
- Integrated augmented Reality (AR) and Virtual Reality (VR).
- Lighting control components.

Material Choices:

- Sustainable, Eco-friendly materials that are durable and easy to maintain.
- Acoustic materials to manage noise levels and create a conducive learning environment.
- Think about how materials can also contribute to the overall aesthetic and functionality.



Competition Rules

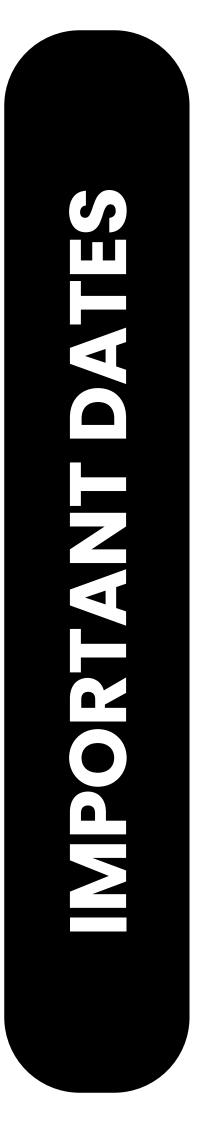
- 1. Participants can compete in either or both tracks.
- 2. Submissions must demonstrate creativity, innovation, functionality, sustainability, and an understanding of the challenges posed by technology and AI in education.
- 3. Winning entries will be selected based on judges' evaluations, considering design concept, technology integration, creativity, feasibility, user experience, and overall coherence.

Eligibility and Team Structure

- **Eligibility:** Open to all students and young practitioners.
- **Team Size:** Up to 3 participants per team.

Registration Fees

Free of Charge.



17th of August

Competition launch

25th of August

Registration Deadline

28th of August

Deadline for Q&A

03rd of September

Submission Deadline

13th of September

Shortlist Announcement

18th of September

Winners Announcement

1st Place

- 3000 EGP Prize Money
- Certificate of 1st prize winner.
- Proposal publication in the REC magazine.
- · Social media and website publicity.

2nd Place

- Certificate of 2nd place award
- · Publication in REC magazine
- · Website and social media publicity.

3rd Place

- Certificate of 3rd place award
- · Publication in REC magazine
- Website and social media publicity.

Top 5

- · Certificate of honorable mention.
- Proposal publication in REC magazine with 75% discount.
- · Website and social media publicity.

All Participants

- Certificate of participation.
- Publication in REC magazine with 50% discount.



Submission Instructions

- All participants should register by <u>August 25 2024, 23:59PM</u>
- Submission link will be sent to participants after registering and All Submissions must be sent by <u>September 03 2024, 23:59PM.</u>
- Participants should ensure that their submissions are complete and adhere to the competition's guidelines.

Cancellation of Competition Clause

The Organizer reserves the right to cancel the competition for any reason, including insufficient participants, technical issues, legal restrictions, or force majeure events. In case of cancellation, participants will be notified promptly via email and the official competition website. The Organizer is not liable for any costs or losses incurred due to cancellation.

Good luck to all participants!

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Register Here