



# EXTENDED ABSTRACT



**InViCCAD 2025**  
1<sup>ST</sup> INTERNATIONAL VIRTUAL COMPETITION OF CREATIVE  
ARTS & INNOVATIVE DESIGN IN TEACHING & LEARNING



# Design Innovation Academic Show 2025



Organized by



Fakulti  
Seni Lukis & Seni Reka  
Cawangan Kedah



اوسها تقوى موليا

Collaboration with



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**EXTENDED  
ABSTRACT**

**Design  
Innovation  
Academic  
Show 2025**





DIAS 2025 (Design Innovation Academic Show) is all about "Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st Century Education." This vibrant program shines a spotlight on how creativity and innovation are reshaping modern education.

It consists of three key components. First up is the Mindareka Design Show, an exhibition that showcases students' final year projects and creative designs, giving them a chance to connect with industry professionals and the wider community. Next, we have the Northern Innovation Academic Tour (NIAT), which takes participants on an academic adventure to select institutions and innovation centers in the northern region, aimed at promoting knowledge sharing and building strong academic and professional networks.

Finally, there's the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID), a global competition that recognizes outstanding practices in teaching and learning by blending art, technology, and innovative design. But DIAS 2025 is more than just a talent showcase; it's a powerful platform for empowering both students and educators, while also strengthening collaborations between universities, creative industries, and global communities. With its inclusive and interdisciplinary approach, this initiative strives to spark relevant, competitive, and impactful ideas and innovations that truly benefit society and push the future of education forward.



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**D**esign  
*Innovation*  
**A**cademic  
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**Prof. Dr. Roshima Haji Said**  
Acting Rector  
UiTM Kedah Branch

# Rector's Message

I am delighted to extend my heartfelt congratulations to the College of Creative Arts, UiTM Kedah Branch, for bringing MINDAREKA 2024 - Unleashing Your Visual Creativity to fruition. The triumphs of past MINDAREKA editions undoubtedly fueled the organization of this year's event, making MINDAREKA 2024 a reality.

MINDAREKA 2024 - Unleashing Your Visual Creativity stands as a testament to the dedication of students at the College of Creative Arts, UiTM Kedah Branch, providing them with a platform to showcase their final art projects. Beyond serving as a space for the exploration of fresh, innovative, and entrepreneurial concepts, this exhibition is poised to connect aspiring talents with potential clients and employers.

I extend my sincere gratitude to all participants whose enthusiasm and support have contributed to the success of MINDAREKA 2024 - Unleashing Your Visual Creativity. Their unwavering belief and commitment have truly brought this event to life, marking it as a resounding triumph!





# Head of Faculty Message

It is an honour to introduce DIAS 2025 – Design Innovation Academic Show, held under the theme “Transcending the Boundaries of Creativity: Innovation in Art & Design for 21st-Century Education.” This significant event reflects the faculty’s ongoing commitment to fostering a culture of innovation, critical thinking, and creative exploration among our students and academic community. As we navigate the complexities of the 21st century, it becomes increasingly clear that education must go beyond traditional boundaries to embrace multidisciplinary approaches that are both relevant and future-forward.

The three core components of DIAS 2025, Mindareka Design Show, Northern Innovation Academic Tour (NIAT), and the 1st International Virtual Competition of Creative Arts & Innovative Design in Teaching & Learning (InViCCAID) which is serve as vital platforms to highlight the convergence of design, technology, and pedagogy. These initiatives not only empower our students to showcase their talents and ideas, but also create opportunities for engagement with industry leaders, academic peers, and global collaborators. The Mindareka Design Show celebrates student creativity and innovation through compelling final year projects. NIAT fosters knowledge sharing and institutional partnerships through academic visits and exchanges, while InViCCAID offers international recognition for excellence in integrating art and design into teaching and learning.

I would like to express my deepest appreciation to the organising committee, faculty members, students, and strategic partners who have worked tirelessly to bring this programme to life. Your dedication and collaborative spirit have made DIAS 2025 a reality and a reflection of our shared vision for transformative education. It is my hope that this platform will continue to inspire meaningful dialogue, cultivate groundbreaking ideas, and spark a new wave of innovation that enriches both education and society.



**Mohamat Najib Mat Noor**  
Head of Faculty  
Faculty of Arts & Design  
UiTM Kedah Branch





***Industrial  
Design  
(Diploma)***





## AURAZ | SUPERCAR

MUHAMMAD ASHABUNYAMIN BIN SHAHRUL, ZAIDI BIN YUSOFF,

Industrial Design Department,  
Faculty of Art and Design,  
University Teknologi MARA (UiTM)  
[myamin4114@gmail.com](mailto:myamin4114@gmail.com)

### ABSTRACT

AURAZ is Malaysia's first fully developed supercar, representing a new era of national innovation in automotive engineering. This high-performance hybrid supercar integrates advanced electric and combustion technologies to deliver extraordinary speed, handling, and efficiency. Designed with a lightweight carbon-fibre body and aerodynamic form, AURAZ balances power with sustainability. More than just a machine, AURAZ is a symbol of Malaysia's capability to compete globally in the luxury car market, blending modern technology, environmental awareness, and national identity into a bold automotive statement.

**Keywords:** Malaysian Hybrid supercar, High-performance, Aerodynamic, Sustainability, Malaysian innovation

### INTRODUCTION

AURAZ supercar is a groundbreaking achievement in Malaysia's automotive industry, proudly standing as the nation's first-ever supercar. Designed to push the boundaries of performance, innovation and identity, AURAZ represents a bold step forward in engineering excellence. Developed with a powerful hybrid system, advanced aerodynamics and a lightweight structure, the vehicle offers a thrilling driving experience while embracing modern sustainability values. AURAZ not only showcases cutting-edge technology but also carries the spirit of Malaysia, proving that a world-class supercar can emerge from Southeast Asia and redefine global expectations.



## MATERIALS AND METHODS

The development of the AURAZ supercar focused on using high-quality materials and modern techniques to achieve performance, safety, and sustainability. The car's main body structure was built using carbon fibre and aluminium alloy. Carbon fibre was chosen because it is very strong yet lightweight, which helps improve speed and fuel efficiency. Aluminium was used for the frame and certain structural parts to give a solid base without adding too much weight. These materials help AURAZ achieve better acceleration, stability, and safety on the road. Inside the car, the interior was designed with a mix of synthetic leather, rubber grips, and plastic composites to give a premium, sporty, and comfortable feel. These materials are also durable, easy to maintain, and lightweight. The steering wheel, seats, dashboard, and control panels were made to be ergonomic and user-friendly.

For the engine and power system, AURAZ uses a hybrid setup, combining a high-performance petrol engine with electric motors. This system allows the car to produce strong power while also reducing fuel usage and emissions. The hybrid battery system uses lithium-ion cells, which are commonly used in modern electric vehicles for their reliability and performance. In terms of technique, the design process started with 3D computer modelling to shape the car and test ideas virtually. Software like CAD (Computer-Aided Design) was used to design each part of the car with precision. After that, aerodynamic tests using computer simulations and wind tunnel testing were done to improve the car's shape and reduce air resistance.

This process helps the car move faster and more efficiently. Once the design was finalised, the car parts were produced using CNC (Computer Numerical Control) machines and robotic arms to cut and assemble components with high accuracy. The car body was moulded using vacuum-forming techniques to shape carbon fibre layers into strong panels. Every part of the car was checked and tested during the production process. Finally, AURAZ went through real-world testing, including speed tests, braking tests, and road handling checks to ensure that it meets safety standards and delivers the performance expected from a supercar.



Figure 1.1 The picture of final body structure

## RESULTS AND DISCUSSION

The AURAZ supercar successfully met its performance and design goals. The hybrid engine system delivered strong acceleration and a top speed of over 300 km/h, while also reducing fuel consumption and emissions. This proves that combining speed with eco-friendly technology is possible. The use of carbon fibre and aluminium helped lower the car's weight, which improved handling, braking, and fuel efficiency. In road tests, AURAZ showed excellent stability and control, especially during high-speed turns and sudden braking.

The aerodynamic shape allowed smoother airflow, reducing drag and increasing speed. The interior was also well-received—test users praised the comfort, modern dashboard layout, and easy-to-use controls. The materials used, such as synthetic leather and rubber grips, added to the premium feel. Overall, AURAZ is a strong example of how Malaysia can build a world-class supercar by combining smart design, advanced technology, and sustainability. The project shows potential for local innovation in the global automotive market.

## CONCLUSION & RECOMMENDATION

In conclusion, the AURAZ supercar proves that Malaysia has the potential to enter the high-performance automotive industry with a strong, innovative, and eco-friendly product. By using lightweight materials and a hybrid power system, AURAZ achieves both speed and sustainability. The design, comfort, and overall performance of the car demonstrate that local engineering can meet international standards.



For future development, it is recommended to continue improving the hybrid system for longer battery range and faster charging. More focus can also be placed on smart features like self-driving technology, digital displays, and enhanced safety systems. Marketing efforts should highlight AURAZ as a symbol of national pride and innovation to attract both local and international buyers.



Figure 1.2 The picture of Auraz supercar test drive in a racetrack

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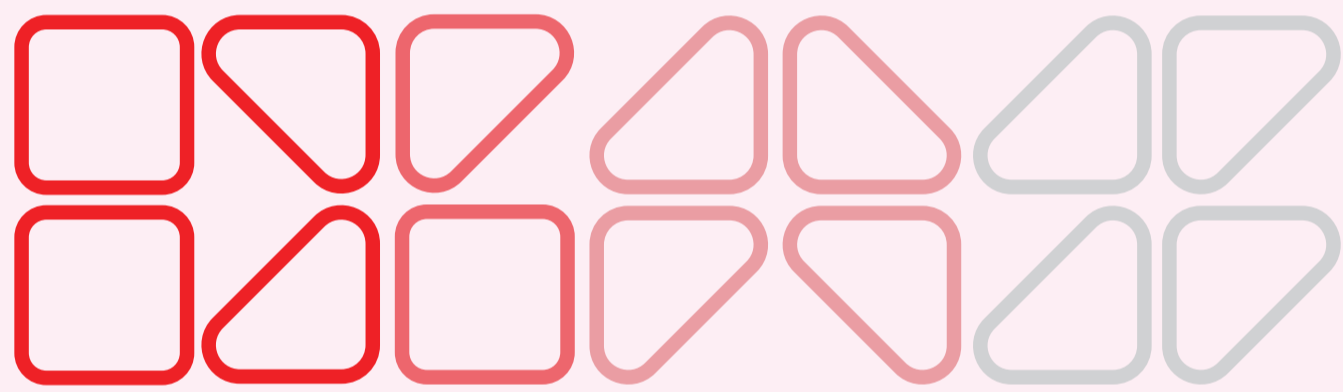
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