Robotics Hackathon 2025

Innovation, precision, and teamwork converged at the Robotics Hackathon 2025, a milestone event hosted by the Faculty of Engineering, Science & Technology (FEST).

Student teams were challenged to build autonomous robots capable of navigating a grid of white lines, collecting cubes from designated locations, and depositing them in a central bin, all without any manual control.

Robots were judged based on their ability to autonomously follow a grid of white lines,

accurately detect and collect color-coded cubes, and precisely place them in a central bin. Teams were also assessed on how efficiently their robots handled unexpected challenges, as well as the overall quality of their code, design innovation, and teamwork.

Each performance was evaluated using a unified 130-point rubric, with additional bonus points awarded for completing the collection of all four cubes, achieving the fastest time, and operating with full autonomy.

FEST hopes to mount another Hackathon, come 2026 with more challengings tasks and variations.

Top Scorer – Group E

The Top Scorer Award went to the team with the highest overall points. This team demonstrated excellence across every category.

Most Creative Design – Group F

Awarded for exceptional mechanical and structural creativity, this team took a bold approach to design. Their robot featured an innovative cube-grabbing mechanism, a lightweight yet sturdy chassis, and aesthetic detailing that set it apart.

Most Robust Code – Group E

This team impressed judges with the most resilient and adaptable software system. Their code architecture featured modular functions, real-time sensor feedback loops, error-handling protocols, and fallback strategies when detecting cube misalignment or junction misreads.

Audience Favorite – Group C

Voted by mentors, and visitors, this award recognized the team that captured the hearts and applause of the audience. Their robot wasn't just functional—it was entertaining, stylish, and showcased excellent live interaction.

This hackathon was more than a test of engineering—it was a celebration of innovation, learning, and community. The creativity and resilience shown by our students prove that they are ready to tackle real-world challenges.

The Robotics Hackathon 2025 sets a new precedent for interactive learning and technical excellence, and plans are already underway for a larger, regional event in the coming year.

Renewable Energy and the Future

For the past 2000 years, the Middle East has been a hotbed of conflicts. It also happens to be a major oil producing region. Maldives and many countries in the region depend on oil to power its industry. Thus, to insulate Maldives from supply interruptions, the role of renewable energy cannot be underestimated. And, for Maldives, there is no more cost-effective renewable energy than solar energy.

As solar energy is produced only during the day, methods of storing energy are of paramount importance. And there is no better storage than utility-sized batteries for the Maldives. Unfortunately, such batteries are very expensive. But, a bold step needs to be taken to install utility-sized batteries in smaller islands even as an experiment.

TOP
PROGRAMMING LANGUAGES
FOR KIDS

05 RUBY
Ruby, a versatile programming language, offers a balance between functional and imperative styles, making it accessible for children. It's free and powerful, inspiring creations like Twitter.

06 C++
C++ is a beginner-friendly programming language with versatility for game development, desktop apps, and more. It empowers programmers with diverse styles.

04 SWIFT
Swift, developed by Apple, is a beginner-friendly visual programming language created for creating iOS and macOS apps. suitable for kids aged 9+.

07 PYTHON
Python, a popular and beginner-friendly language, offers a great choice for kids transitioning from block-based programming.

03 BLOCKY
Blockly, created by Google, is a free, user-friendly visual programming language used for teaching coding concepts in multiple languages.

08 HTML/CSS
HTML and CSS, fundamental web development languages, are an easy and straightforward introduction to building websites and web applications.

02 SNAP!
Snap! is a web-based visual programming language for children developed by MIT Media Lab. It allows kids to create diverse programs from games to complex projects.

09 JAVA
Java, a widely used programming language, excels in app development, enabling them to create mobile apps, games, and web applications.

MC NPRENEUR
Igniting Sparks of Innovation

01 SCRATCH
a block-based visual programming language created by MIT for kids. With 100 million users worldwide, it's the largest free coding community for children aged 8-16.

10 LUA
Lua, a versatile programming language, excels in embedded systems and applications. Its simplicity and easy syntax make it accessible for all skill levels.