General

35 IPGM Sultan Mizan Campus students participate in Raspberry Pi Programming 2024

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PEKAN, 2 June 2024 – Recently, 35 students from the Institute of Teacher Education Malaysia (IPGM), Sultan Mizan Campus, Besut, Terengganu participated in the Raspberry Pi 2024 Programming to improve programming skills at the STEM Laboratory, Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA).

The three-day programme was conducted by the staff of the Faculty of Electrical and Electronic Engineering Technology (FTKEE) led by Associate Professor Ir. Dr. Nurul Hazlina Noordin.

According to Associate Professor Ir. Dr. Nurul Hazlina, this programme aimed to introduce students to the basics of Raspberry Pi programming and the application of the internet of things (IoT).

“The activities are not only interesting but also informative which include basic digital input/output operations using internal LEDs, dashboard design using sensor data such as gyrometers and BMU280, and collecting and storing data in cloud databases.

“The pico-satellite learning kits are specifically designed to facilitate engineering learning.

“Participants also learned to connect sensors with Raspberry Pi boards and develop IoT applications for real-world scenarios as well as share IoT technologies and their applications in various domains,” she said.

In addition, students learned the application of MicroPython programming in life.

“Students will master the basic skills of the Python language through the concept of input and output as well as the use of mathematical variables and operators.

“The programme also emphasises hands-on aspects with various practical activities such as flashing LEDs, interacting with sensors for environmental monitoring, using displays for data visualisation and integrating camera modules for image capture and processing.

“Students are also encouraged to design and build their own IoT projects from simple sensor monitoring systems to more complex applications,” she said.

She hoped that this workshop could provide a lot of knowledge and benefits to all participants.

According to the Head of the Robotics and Informatics Sector, IPGM Sultan Mizan Campus, Dr. Hazlina Awang Lah, the collaboration between IPGM and UMPSA in the academic field has long been established.

“However, this year is more special when students can learn in more detail throughout the programme.

“For me, the knowledge shared is beneficial for students because they understand more easily.

“It can also foster students’ interest in programming and robotics,” she said.

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