JUNIOR RESEARCHER MENTORING PROGRAMME 2022

Code:	JRMP2022_02
School / Department:	Department of Applied Physics
Name of Research Leader:	Dr Peter Tsang Y.H., Assistant Professor
Research Topic:	Application for Teaching Industry 4.0 in Design - DOBOT Magician Robotic Arm
Short Description of the Research Project:	AI-controlled robotic arm is one of the essential tools for Manufacturing 4.0. The use of the AI robotic arm is now widespread. From modern agriculture to space exploration, the use of AI and robotic arms is increasingly prevalent. Industrial automation is heavily dependent on AI and the robotic arm. The automobile, IC engineering, food and processing industries, and even inventory control in the glossary and e-commerce sectors are now adapting themselves by introducing AI, computer vision and robotics. The use of AI and robotic arms in various labs will allow students to upgrade themselves with new technologies and will eventually contribute to the forthcoming industrial revolution. Experiments will be created by using robotic arm for different courses in the department. Different experiments integrating innovative ideas will be designed and executed using these robotic arms. These experiments will mainly focus on but not limited to

	scientific research.
No. of Places Offered:	2
Frequency of Meetings:	Weekly
Special Requirement(s):	- Students should have basic knowledge about how DOBOT robotic arm function. - Students should be able to learn to use 'DOBOT Studio' software. - Students should have basic knowledge of any programming language like python or C#.

* The information presented above is subject to change.