

# Junior Researcher Mentoring Programme

2023

<b>Code:</b>	JRMP2023_44
<b>School / Department:</b>	Department of Applied Physics
<b>Name of Research Team Member(s):</b>	Dr Dennis Leung, Associate Head and Associate Professor
<b>Research Topic:</b>	Design of IoT Systems
<b>Short Description of the Research Project:</b>	<p>IoT devices and systems are omni-present in our daily lives, collecting information from various sources (e.g. our house, the environment, or our bodies). For example, various remote-controlled experiments have been constructed for our award-winning LabXRA platform (<a href="https://stem-ap.polyu.edu.hk/home_en.html">https://stem-ap.polyu.edu.hk/home_en.html</a>).</p> <p>In this project, the participating students will design and implement a custom-made IoT system. Starting from scratch, they will choose and prepare custom-made IoT components that would perform specific tasks. Such components will then be assembled to execute functions according to the needs of the chosen application, with the data collected either for subsequent analysis or feedback control.</p> <p>Through the project, the participating students can master a broad range of technical knowledge (programming, electronics, 3D printing) as well as 'soft skills' (project design and implementation, logical reasoning, team work and communication).</p>
<b>No. of Places Offered:</b>	3

<b>Frequency of Meetings:</b>	Bi-weekly
<b>Special Requirement(s):</b>	The participating students should have previous experiences in programming (python), IoT systems, or 3D printing.

*\* The information presented above is subject to change.*