

Junior Researcher Mentoring Programme

2023

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| Code: | JRMP2023_12 |
| School / Department: | Department of Electrical Engineering |
| Name of Research Team Member(s): | Dr Siqi Bu, Associate Professor Prof. Eric Cheng, Professor Prof. C.Y. Chung, Chair Professor and Head of EE Department |
| Research Topic: | Carbon Emission Source Identification and Monitoring in Hong Kong |
| Short Description of the Research Project: | <p>With the context of the 2050 Carbon Neutrality target agreed by the Hong Kong government, this project aims to nurture secondary school students to gain an awareness of carbon emission causes, monitoring and control for global warming restrictions and environmental protection.</p> <p>The task of the project is to identify the main carbon emission sources in Hong Kong, and monitor the emission amount of carbon dioxide from these main carbon emission sources, based on their electricity consumption and the corresponding carbon intensity coefficient. A real-time carbon emission flow monitoring tool will also be provided to the participating students to appreciate how the carbon emission flow is monitored and tracked in the electrical energy system.</p> <p>The deliverable of this project will be a report on the carbon emission dynamics in Hong Kong including the main carbon emission sources and their carbon emission monitoring results. After the completion of the project, the participating students will gain basic knowledge of electrical energy systems and carbon emission, and will also be equipped with</p> |

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| | the capabilities of data collection and analytics. |
| No. of Places Offered: | 2 |
| Frequency of Meetings: | Monthly |
| Special Requirement(s): | Nil |

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