

<b>Project Code</b>	E2_SAND_1	
<b>Project Details</b>	<b>Internship Category</b>	Sandwich
	<b>Internship Period</b>	June 2019 to June 2020
	<b>Preferred Disciplines</b>	<b>First Preference:</b> Mechatronic Engineering <b>Other Preference:</b> Electrical Engineering
	<b>Project Name</b>	Generation Control Simulator
	<b>Business Objective(s)</b>	<ul style="list-style-type: none"> <li>• Develop a PLC and Explosion Proof Electrical System demo unit to support Generation Business Group (Power Station) training</li> </ul>
	<b>Project Descriptions</b>	<ul style="list-style-type: none"> <li>• Development of a Programmable Logic Controller (PLC) simulator, coupled with a demonstration unit for explosion proof control &amp; indication system.</li> </ul>
	<b>Project Deliverables</b>	<ul style="list-style-type: none"> <li>• Programmable Logic Controller (PLC).</li> <li>• Design and build a PLC for the demonstration of application in generation control. Explosion Proof Control and Indication System</li> <li>• Design and build a demonstration unit for explosion proof control and indication system</li> </ul>
	<b>Required Skills</b>	<ul style="list-style-type: none"> <li>• Basic knowledge in Control and Instrumentation?E.Digital System knowledge or PLC Programming skill would be advantage</li> <li>• Willing to do hands on work.</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>• PLC engineering, programming techniques and maintenance skill</li> <li>• EX Electrical Equipment engineering and installation techniques</li> <li>• Training material development and editing skill.</li> </ul>	

<b>Project Code</b>	E2_SAND_2	
<b>Project Details</b>	<b>Internship Category</b>	Sandwich
	<b>Internship Period</b>	July 2019 to June 2020
	<b>Preferred Disciplines</b>	<b>First Preference:</b> Electrical / Electronic Engineering <b>Other Preference:</b> Computer Engineering / Computer Science
	<b>Project Name</b>	Technology Development of Secondary Systems in Digital Smart Substation
	<b>Business Objective(s)</b>	<ul style="list-style-type: none"> <li>To study the technology trends of secondary systems in digital smart substation.</li> <li>To review technical proposal from vendors, evaluate new equipment and support field trial.</li> </ul>
	<b>Project Descriptions</b>	<ul style="list-style-type: none"> <li>The systems for transmission and distribution are undergoing a radical transformation, with integration of information and operational technology. IT/OT is inevitable and cybersecurity is crucial. Demand for using "Smart" equipment and "Intelligent" devices inside power substations are increasing to achieve cost saving, better operating efficiency and safety. The candidate will work with engineers to support the project planning, equipment evaluation and development of solutions. Pilot project implementation will be conducted for proof of concept.</li> </ul>
	<b>Project Deliverables</b>	<ul style="list-style-type: none"> <li>Technical evaluation report.</li> <li>Testing and commissioning report</li> </ul>
	<b>Required Skills</b>	<ul style="list-style-type: none"> <li>Basic knowledge of transmission and distribution systems, good understanding of data communication or information technology.</li> <li>Competent computer skill, including Microsoft Office.</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>Identify critical criteria for equipment evaluation.</li> <li>Test plan development for specific equipment.</li> <li>Develop problem solving, team work and communication skill within a corporate environment.</li> </ul>	

<b>Project Code</b>	E2_SUM_1	
<b>Project Details</b>	<b>Internship Category</b>	Summer
	<b>Internship Period</b>	June 2019 to August 2019
	<b>Preferred Disciplines</b>	<b>First Preference:</b> Electronic Engineering <b>Other Preference:</b> Electrical Engineering
	<b>Project Name</b>	Smart 400kV GIS condition monitoring platform development at power station
	<b>Business Objective(s)</b>	<ul style="list-style-type: none"> <li>• Maintain the reliability and availability of Castle Peak / Black Point 400 kV GIS.</li> </ul>
	<b>Project Descriptions</b>	<ul style="list-style-type: none"> <li>• The 400 kV Substation at Castle Peak Power Station (CPPS) and Black Point Power Station (BPPS) were commissioned on 1981 and 1995 respectively. They have reached the end or middle of design life. Development of condition monitoring system will help to identify incipient faults and maintain the system availability and security on the GIS..</li> </ul>
	<b>Project Deliverables</b>	<ul style="list-style-type: none"> <li>• To perform studies and submit proposal for development of condition monitoring system on 400 kV GIS.</li> <li>• To support the project team on project development / management and site implementation for the above-mentioned project.</li> </ul>
	<b>Required Skills</b>	<ul style="list-style-type: none"> <li>• Good communication and analytical skills</li> <li>• Fundamental electrical engineering and software compilation knowledge</li> <li>• Fluent in both Cantonese and English</li> <li>• Good in Mandarin</li> <li>• Proficient Word, Excel and Powerpoint skills</li> </ul>
<b>Learning</b>	<ul style="list-style-type: none"> <li>• Safety and quality requirements in power station</li> <li>• Project development/management and site supervision skills</li> <li>• 400 kV GIS architecture.</li> <li>• GIS condition monitoring and analysis..</li> </ul>	