CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_01	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Computer Engineering, Computer Science, Information Engineering, Information Technology **Other Preference:** Business
	Project Name	Process Optimization and Automation
	Business Objective(s)	• To enhance workforce efficiency and customer satisfaction through process optimization using various process improvement theories and tools, and innovative process automation with the application of Microsoft O365 solutions and Robotic Process Automation tools
	Project Description	• Liaise with stakeholders to identify process improvement opportunities • Collect user requirements to map out 'As-Is' process and streamline the process • Facilitate adoptions of digital and automation solutions to enhance customer experience and operational efficiency • Prepare user testing plan to collect user feedbacks and conduct solutions refinement • Conduct benefit realization calculation.
	Required Skills	• Interested in digitalization and process automation • Good presentation and communication skills • Stakeholder engagement skills • Basic computer coding skills • Understanding of basic process improvement theories would be an advantage • Understanding of Microsoft Power Platform O365 and Robotic Process Automation tool BluePrism would be an advantage.

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_02	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Computer Science/Engineering **Other Preference:** Information Systems
	Project Name	Network & Security Infrastructure Automation
	Business Objective(s)	• Traditional network offerings are not suited to delivering reliable, agile, cost-effective and high performing solutions in support of hybrid cloud IT architectures. • To transform our network operations from traditionally manual configuration to automation and programmability to integrate the network with orchestration at the upper layers of the infrastructure.
	Project Description	• Reduce the time to deploy applications and eliminate manual processes by automating complex networking tasks • Enable operators to easily deploy, manage and optimize network infrastructure • Automate networking tasks, reducing risk of outages from manual errors and driving down ticket driven operations.
	Required Skills	• Basic Networking and Network Security knowledge • Programming language (e.g. Python) • Basic Cloud computing knowledge

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_03	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Computer Science/Engineering **Other Preference:** Nil
	Project Name	Cloud platform Automation
	Business Objective(s)	• Transform the platform team operation, target to simplify and automate our system support through pipeline and automation to support the flexible business models. • This project is to focus on how we enhance out platform through programmability. It will integrate the cloud platform with orchestration tool.
	Project Description	• Reduce the time to deliver platform service and eliminate manual process by automating complex operation tasks • Enable operation support to provision, manage and provision cloud computing resource • Automate daily operation tasks, reducing risk of outage from manual errors
	Required Skills	• Identify operation task that could be automated • Develop a automation scripts for identified operation tasks • Develop a framework of cloud platform automation

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_04	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jul 2022 to Jul 2023
	Preferred Discipline	**First Preference:** Information Technology/Computer Science/Project Management **Other Preference:** Business
	Project Name	Digital enterprise adoption
	Business Objective(s)	• To enhance digitialization in CLP to achieve the vision of digital utility of future by adopting various latest end user technology e.g. O365 solutions, power platform, virtual desktop, video conferencing, etc.
	Project Description	• Support the adoption of latest end user computing technology • Collect user requirement to understand the AS-IS process and propose TO-BE improvement • Facilitate the architecture review and conduct research and configuration on new solution • Plan and assist the roll out to ensure satisfied user experience
	Required Skills	• Basic IT skill with tech-savy mindset • Interested in digitalization and automation • Able to think from business users perspective to bridge user requirements with IT specifications • Good presentation and communication skills • Basic programming background would be an advantage • Familiar with Azure/O365/Power platform would be an advantage

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_05	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jul 2022 to Jun 2023
	Preferred Discipline	**First Preference:** Management Information System Information System related **Other Preference:** Computer Science related
	Project Name	Digital Process Automation with Cloud Native Technology
	Business Objective(s)	• Leverage low code platforms to develop automation solution for key business users to streamline business process and improve operational efficiency • Conduct researches and coordinate with cloud service provides to support business innovation projects • Support Proof of Concept projects to validate technology feasibility for digital solutions
	Project Description	• Work with Project Manager to conduct market research on technology innovations and digital technologies (cloud, AI, ML, data analytics) • Leverage low-code / no-code platform to develop process automation solutions based on the business requirements • Coordinate with external software or cloud vendors (Azure, AWS etc) to facilitate the solution proposals and solution • Support Project Manager to analyze multiple technology tools and prepare presentation for the key stakeholders
	Required Skills	• Cloud computing knowledge • Hands on experience with any cloud platforms (e.g. Azure, AWS etc) • Coordination with multiple stakeholders • Attitude is the most important: Willing to learn, open minded, proactive to take different tasks, passionate.

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_06	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jul 2022 to Jun 2023
	Preferred Discipline	**First Preference:** Business/Psychology/Liberal Arts **Other Preference:** Computer Science/Software Engineering
	Project Name	Digital Enterprise IT product marketing and end user engagement
	Business Objective(s)	• The Change Management team inside Group IT is tasked with bringing the rich offering of IT's Digital Enterprise initiative to CLP internal users, raising awareness of and driving adoption of the newest Cloud-based technologies to enhance productivity and smoothen collaborations. It's a strategic multi-year initiative that targets at digitalising the ways of working at CLP and making CLP people more connected wherever and whenever they work.
	Project Description	• Typical work will involve change management activities throughout the IT project lifecycles, e.g. • Pre: Clarify the case for change incl. technology solution research, benefits digging and projection, devise change interventions strategy, craft high-level change management plan incl. timeline, stakeholders identification, user segmentation and corresponding engagement strategy etc. • During: Develop and execute change communications and engagement activities per target audience group, monitor change metrics and design further change interventions, report progress to leadership etc. • After: Measure change adoption, survey C-Sat, identify further change intervention needs etc.
	Required Skills	• Self starter with a keen interest in new technologies (mainly low code/no code – academic background in Computer Science is NOT required but will be valued); • Professional, efficient and effective communications with various stakeholders (both working levels and senior management), confident to present and interact with stakeholder enquiries; • Organised and paying adequate attention to details, effectively juggling between competing priorities and practise ruthless prioritisation;

		- Passionate about project management and end-to-end process revamp, knowledge on Design Thinking will be valued; - Creative and interested in storytelling, confident to create artefacts of various formats to present to target audience and relevant stakeholders.

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_07	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Engineering (Computer Science) **Other Preference:** Data Science and Engineering
	Project Name	Robotic Process Automation (RPA) for Process Simplification
	Business Objective(s)	• To enhance the work efficiency with digitalization by RPA. The RPA process is expected to reduce time spend on rote tasks by users and free up work time for more productive endeavors • To demonstrate the capability of RPA system in aiding colleagues in their daily tasks and promote the use of RPA in different areas.
	Project Description	• RPA application are important tools for process simplification. It is widely used in Black Point Power Station to simplify and automate the working process of different tasks. Tangible benefits such as eliminating the use of paper and reducing the process time can be achieved by digitalized form, automated approval workflow and report generation. The software used are mainly Microsoft O365 and Blue Prism • This project aims to engage with colleagues from different departments to seek for RPA application potential.cases and develop the simplified and automated flow for each case. Moreover, successful application can promote the innovative culture of constantly brainstorming for ideas to improve current workflow.
	Required Skills	• Good knowledge of computer software application such as Power Apps, Power Automate, Blue Prism, etc • Good communication skills to discuss user requirements with users.

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_08	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Computer Science, Cyber Security Related **Other Preference:** Business Information System related
	Project Name	Cyber Security Architecture Enhancement
	Business Objective(s)	• At CLP, our business commitment is to ensure continuous supply of electricity to public. As such, it is critical for us to design proper security architecture, implement appropriate technologies and policies to enhance overall cyber security protection for the enterprise • CLP Group Security looks after cyber security for different regions under CLP Group. You will involve in a team that responsible for maintaining security standard and architecture in various projects across different regions
	Project Description	• The intern will have chance to engage in different areas of cyber security including below • Understand how cyber security implement in enterprise environment with process, procedures, technologies and policies • Understand and maintaining cyber security policy, standard and requirement • Involving in research and implementing on leading edge cyber security technologies • Engaging with different expert in other regions • Learn from cyber security expert on the security practices
	Required Skills	• Proactive learner • Basic concept on cyber security is an advantage.

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_09	
Project Detail	Internship Category	Sandwich
	Internship Period	Jun 2022 to Jun 2023
	Preferred Discipline	**First Preference:** Information Security / Computer Science **Other Preference:** Engineering
	Project Name	Cyber Technology and Incident Response Optimisation
	Business Objective(s)	• At CLP, our business commitment is to ensure continuous supply of electricity to public. As such, it is critical to hold a strong cyber defense, and handle cyber incident professionally.
	Project Description	• As an intern in Cyber Security Team, you will assist Project Owner to: • Deploy new technologies to detect, prevent and handle cyber attack • Practice cyber incident response process to evaluate the project value • Study the technical features of the existing security systems • Automate cyber operation processes • Conduct data analytic on information from multiple security systems • Establish new operational process for the new system, and integrate into the existing CLP's cyber ecosystem • Enhance vulnerability management program.
	Required Skills	• Technology related • Proficient in Microsoft Office Tools • Basic understanding of cyber attack scenarios and protection Non-technology related • Fast learner with "can-do" attitude • Proficient in both English. Chinese is optional but preferred • Ability to communicate and document technical details in a concise, understandable manner

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_10	
Project Detail	Internship Category	Sandwich
	Internship Period	Sep 2022 to Aug 2023
	Preferred Discipline	**First Preference:** IT / Cyber Security related **Other Preference:** Psychology / Business related
	Project Name	Cyber Intelligence, Communications & Awareness
	Business Objective(s)	• Enhancing CLP's visibility of the cyber landscape - intent and capabilities of malicious cyber threats, including the actors, tools, and TTPs, through the identification of trends, patterns, and emerging threats and risks. Providing timely warnings to relevant decision and policy makers. • Reduce human-risks through engaging and targeted behavioural change initiatives, ensuring staff are aware of cyber risks and are equipped with practical tips to apply good cyber practices at work and at home.
	Project Description	• Cyber Intelligence, Awareness and Communications focuses on delivering specific and relevant content / messages to the right people, at the right time, and through the right channels • The intern will have the opportunity to work on the following: • Cyber Intel - Consume, analyze and deduce sourced intel and disseminate to relevant Communities of Interests appropriately. Ensuring pro-active mitigations are performed to protect CLP from threats • Behavioural change - Design and deliver impactful initiatives to drive staff towards applying good cyber practices in and out of work, such as phishing simulation, awareness month, cyber tips of the month, etc..
	Required Skills	• Technical Skills - Word, Excel, PowerPoint, etc. • Non-technical Skills - Cantonese, Mandarin, Graphic Design, Video Editing, etc..

CLP Internship Programme 2022

Project Focus – Information Technology (12-month)

Project Code	IT_SAND_11	
Project Detail	**Internship Category**	Sandwich
	Internship Period	Jun 2022 to May 2023
	Preferred Discipline	**First Preference:** Cyber / Information Security **Other Preference:** Computer Science or Mechanical/Electrical Engineering
	Project Name	Operational Technology / Industrial Control Systems - Security Strengthening
	Business Objective(s)	• At CLP, our business commitment is to ensure continuous supply of electricity to Hong Kong. As such, it is critical for us to protect our operational technology (OT) systems, which is control the operations for the generating, transmitting and distributing power. • For recent years, many cases of power plants around the world had been attacked by different types of Cyber threats which had caused, not only money lost to the company but also affecting the normal life on many people.
	Project Description	• OT/ICS Cyber Security is becoming one of the hottest topics in the industrial operations sector due to many recent Cyber attack as utility companies are usually being targeted. Many companies are looking for ways / methodologies to enhance and prevent systems that are used to monitor and control industrial processes against different types of Cyber Threats which may cause substantial amount of damage lost to company • 3 key objectives of OT/ICS Cyber Security which includes: • Identify and Detect - Discover and eliminate vulnerabilities, mis-configurations,. unsecured connections and unauthorized remote access by enforcing access policies and recording sessions • Protect - System monitoring and detect malicious activity and high-risk changes and prevent any future attacks • Respond - Able to to resolve any new arises issues in fast pace to minimize any further damages and risks..

	Required Skills	• As OT/ICS technology plays an important role for our plants operation and control, it is very important for CLP to protect our assets by strengthen our knowledge of Cyber Security in this field in order to enhance, prevent and avoid any potential risks from Cyber threats.