

June 21, 2024  
By Registered Mail

Dear Sirs/Madams,

**INVITATION TO TENDER**  
**TENDER FOR BROADBAND AND WIFI SERVICE**

**(Suppliers should be reminded not to identify their companies on the envelopes)**

You are invited to tender for the supply and/or undertaking services of the items as specified in the enclosed tender schedule.

1. Your sealed tender, in duplicate, should be clearly marked on the envelope:

**TENDER FOR BROADBAND AND WIFI SERVICE**

The envelope should be addressed to Society of Boys' Centres Hui Chung Sing Memorial School at 150 Pratas Street, Cheung Sha Wan, Kowloon and arrive not later than 12:00 noon on 12<sup>th</sup> July, 2024. Late tenders will not be accepted. Your tender will remain open for 90 days from the "Closing Date", and you may consider your tender to be unsuccessful if no order is placed with you within these 90 days. You are requested to note that unless Part II of the tender form is completed, the tender will not be considered.

2. If you are unable or do not wish to tender, it would be appreciated if you return the statement of expression of no interest for the tender with reason to the above address at your earliest convenience.
3. Tender will be accepted on an overall basis.
4. The tenderer, its employees and agents shall not offer any advantage (as defined in the Prevention of Bribery Ordinance, Cap. 201) to the School employees, Tender Board members, or any parent or student representative in a committee responsible for considering any matter in relation to this contract. Any such offer by the tenderer or its employees or agent may constitute an offence under the Prevention of Bribery Ordinance and may render the contract null and void. The School may also cancel the contract awarded and hold the bidder liable for any loss or damage the School may sustain.

For enquiry, please contact Mr. Tam Man Fai at [tammanfai@sbchcsms.edu.hk](mailto:tammanfai@sbchcsms.edu.hk) or by phone at 27794016.

Yours sincerely,

CHAN WAI CHI  
Principal

## PART A – WiFi NETWORK REQUIREMENTS SPECIFICATION

### 1. Introduction

The Contractor is invited to

- Build up a WiFi network in Society of Boys' Centres Hui Chung Sing Memorial School; and
- Provide and maintain a WiFi service through subscription mode.

### 2. Background

The School will **enhance/top up** the IT infrastructure so as to set up the necessary WiFi environment in the school premises (full WiFi coverage in ALL classrooms) for supporting e-learning in class. Regarding the enhancement of WiFi infrastructure, we would like to hire a contractor to design, build, operate and maintain the whole infrastructure; and to pay for the service by subscription thereafter, through a **subscription** model.

### 3. User Requirements

This section specifies the user requirements of the School of the WiFi network. The Contractor shall be capable of supporting the requirements set out below.

#### 3.1 Standard Provision

- **WiFi Internet Connectivity** - using Wi-Fi 6 network or above in a standard classroom. The minimum number of classrooms to be covered shall be at least equal to the number of approved classes for the 2024/25 school year, that is 11 classrooms.
- **Broadband Service** - provide at least 1Gbps Internet connection at school. Existing Broadband will not be used to support the Wi-Fi network
- **Number of Concurrent Connection** - commensurate with the maximum number of students, say 40, in a class with at least 2.5Mbps upload / download bandwidth per connection for browsing web pages. The contractor shall provide a PoC to prove that the required bandwidth can be supported for 20 devices at the same time before tender award.
- **Authentication Method** - use 802.1x standard based authentication and Hong Kong Education City single sign-on services.
- **Session Control** - Hong Kong Education City authentication service can support one device or multiple devices to connect based on user group (student, teachers).
- **Internet Content Filtering Service** - Cloud based Internet Content filtering profile in Hong Kong commonly adopted by most schools with ability to create black / White list filters and managed by vendors and school.
- **Existing Network** - not to rely on any existing network facilities and cabling of the School, nor interfere with the existing WiFi network of the School. The WiFi network shall be physically separated from the school network

- **Managed Service** - operate the Wi-Fi and its networking devices using managed service model, provide end-to-end service with single point of contact including configuration, provisioning of service, proactive remote monitoring, maintenance and regular reporting.
- **Redundancy** - Redundant WLAN controller shall be provided
- **Service Level Agreement** - ensure at least 99.7% availability of the Wi-Fi service, support four-hour response time and four-hour service recovery with active monitoring, helpdesk support with support hours from Mon to Sat 8:00 am to 6:00 pm, and provide monthly monitoring reports for the School.
- **Contract End Arrangement** - All provisions of trunks, conduits, cables, LAN ports and power points shall be considered as fixture of the School and shall become the property of the School. The Contractor shall remove or keep those provisions according to the instruction of the School. Contractor can remove the network equipment such as switch, routers, and access points.
- **Industrial standard** - The manufacturer of the access point should be positioned in the "2022 Gartner Magic Quadrant for Enterprise Wired and Wireless LAN Infrastructure".

### 3.2 Add-on Service (For details please refer to Section 2 of Part B.)

- **WiFi coverage** - to include special rooms and open areas.
- **Authentication Method** - Authentication method shall includes WPA2 Enterprise, WPA3, OAuth 2.0 and well as MAC address filtering and user account system being used by school, etc.
- **Session Control** - Guest Landing page shall support session control where access time can be changed by school.
- **WLAN system access control** - specific request on MAC address filtering.
- **Internet Content Filtering Service** - Cloud based Internet Content filtering profile in Hong Kong commonly adopted by most schools with ability to create black / White list filters and managed by vendors and school.
- **Monitoring of WiFi network** - specific request on monitoring of Wi-Fi network by the Contractor and the School.
- **MAC Address Monitoring** - The lists of filtering and filtered MAC addresses are to be monitored by the school..
- **Integration of networks** - system integration with existing network with secure design.
- **E-Mail Filtering Service** - can integrate with cloud base email filtering to protect client from email hazard.
- **Zoom Managed Service** - capable to manage the registered Zoom account traffic on the same support platform.
- **Voice Traffic Management** - wireless infrastructure is capable to support the Wi-Fi phone solution within the same network
- **Internet addresses subscription & configuration** - for Internet access to school internal

resources, via system integration

- **Support hours** - extended support hours and/or reduced time for recovery, the SLA must be 4 hours response and 4 hours onsite.
- **Redundancy** - increase the availability of the Wi-Fi service.
- **Mobile Internet Backup Services** - capable to support automatic failover and failback between fixed broadband circuit and mobile network to provide uninterrupted connectivity when the primary broadband connection is unavailable.
- **Pocket Wi-Fi Router** - 3 quantity of 4G (or above) Pocket Wi-Fi routers with 5GB mobile data plan per month.

### 3.3 Deliverables

3.3.1 The Contractor is required to provide the following deliverables for the WiFi network design:

- Master Activity Plan
- Network Configuration Report and Network Diagram
- Network Test Plan and Network Test Result Report
- Operation Manual for End User
- User Acceptance Test Plan
- Exit Plan

3.3.2 The Contractor is required to provide the monthly monitoring report with the following items:

- Network Health Report
- Network Usage Report
- Reporting of security incidents
- Reporting on trend and statistics of incident and their analysis
- Reporting of the failure rate for all equipment with detailed fault analysis
- Problem log and incident log for critical failure of the network
- Statistical report on the type and no. of calls
- Summary of the outstanding enquiry for the month-to-date.

## 4. Technical Specification (Standard Provision)

### 4.1. WiFi Network

4.1.1 The Wireless LAN (WLAN) System of the Wi-Fi network shall support simultaneous dual-operation-mode that is FAT Access Point (AP) and Thin Access Points are both supported together with Cloud-based WLAN Controller in Managed model. Thus local Controller in school is not acceptable. The Cloud-based WLAN Controller shall be located in Hong Kong and is capable of fully centralized provisioning, configuration and monitoring all APs functionalities; a backup of the Cloud-based WLAN Controller shall be available in

Hong Kong.

- 4.1.2 The thin client WLAN Access Point (AP) shall be a high performance wireless network access device, which shall be connected with the Power over Ethernet (PoE) Access Switches via Structured Cabling System.
- 4.1.3 The WLAN APs shall be compatible on both Wi-Fi 5 & Wi-Fi 6 with IEEE 802.11a/b/g/n/ac wave2/ax standard or above, support dual band of minimum 2x2:2 in 2.4GHz and 2x2:2 in 5GHz as well as OFDMA, MU-MIMO and Internal antennas.
- 4.1.4 The Contractor shall design the WLAN System to provide the coverage for the required wireless coverage place. The received signal strength measurement from the WiFi Service at the WiFi client device (such as tablet PC or notebook computer) is no worse than -68 dBm. The Contractor shall provide certificate or test report to illustrate that the WiFi client device for testing satisfies the power emission requirement.
- 4.1.5 The WLAN AP shall support PoE, WPA2, WPA3, IEEE 802.1x and certificate authentication.
- 4.1.6 The WLAN System shall support automatic channel selection, protocol filtering, multicast/broadcast storm filtering and load balancing.
- 4.1.7 The WLAN system shall allow single or multiple devices per user account to be authenticated using 802.1x and Hong Kong Education City single sign-on service.
- 4.1.8 Each WLAN AP shall be able to support at least concurrent 40 users connecting to the network simultaneously. In no circumstance shall the speed of data transmission symmetrically fall below the data rate requirement at any place or any corner or any highly congested area within the areas being covered. In case the transmission speed is below the said data rates, the Contractor shall be responsible for all remedial measures to rectify or configure fine-tuning of antenna or even increase the quantity of the WLAN AP at Contractor's own costs in order to meet the data rate requirement as mentioned in the Specification. A complete set of catalogues with brand and model shall be submitted and highlighted for reference. The catalogues shall show all the features and technical specifications of the products and systems.
- 4.1.9 The WLAN shall allow different authentications by using Service Set Identifiers (SSIDs).
- 4.1.10 Individual APs shall be allowed to be assigned by more than one SSID and up-to eight SSIDs.

- 4.1.11 Antennas of APs shall be capable of detecting user locations in real time for direction switching while devices in motion, beam forming.
- 4.1.12 The DHCP server shall support at least 30 queries/sec.
- 4.1.13 The WLAN system shall suspend the session of the user once the session control is expired and the suspension time shall be configured by the school.
- 4.1.14 The Contractor shall in provision of the service comply with non-interference requirements of and shall not cause interference prohibited under the Telecommunication Ordinance (Cap 106) or any other laws or regulation of Hong Kong.
- 4.1.15 The WLAN System shall provide termination of idle sessions and control of the duration features.
- 4.1.16 The WLAN System shall support client roaming across Access Points.
- 4.1.17 The WLAN system shall cover all areas specified under this tender.
- 4.1.18 The quotation shall include the cost to provide sufficient quantity and its cabling work required, including but not limited to supply and install the Fibre optics, Cat 6 cable, Conduit, cable patch panel, cable faceplate, Cable patch cord.
- 4.1.19 The Contractor shall provide complete set of WLAN Systems which consist of Wireless Access Point, Connection Cable, Authentication System, Wireless LAN Controller, PoE Switch, horizontal UTP Cat 6 cable/OM3 Fiber, patch cable UTP Cat 6 / OM3 Fiber Optics, any required license and all associated accessories.
- 4.1.20 All access points (AP) shall be certified by OFCA and copy of certificates issued by OFCA shall be attached to the proposals.
- 4.1.21 The Contractor shall ensure that there is no interference between WLAN Access Points due to limited non-overlapping channels assignment when the WLAN AP is installed. The Contractor shall be responsible at his own costs for providing solution to eliminate the interferences including but not limited to reassignment of the non-overlapping channels, adding extra APs with lower transmission power and/or replacement of the WLAN AP.
- 4.1.22 The WLAN System shall support Web GUI management.
- 4.1.23 FTP service shall not be allowed in the Wi-Fi network (to avoid exchanging credential and

files in plain text without any encryption).

4.1.24 The WLAN system deployed shall be non-Asian brand.

4.1.25 Mobile 5G Router for Mobile Internet Backup

- System Features:

- Support fault alert
- Support single view for the Wi-Fi and 5G status
- Support auto failover between School Wi-Fi fixed broadband line and 5G network

- Mobile 5G Router:

- Cellular: Standard compliant: 3GPP Release 15(both LTE and 5G)
- LAN port: Support up to 2 x 1GE LAN Ports (RJ45)

- LED display:

- Signal strength indicator
- 5G network status
- LAN Port status

- Peak data rate:

- Sub-6 DL: 2.3Gbps
- UL:1Gbps

## **4.2. Core Switch**

4.2.1. The Core Switch would be responsible for connecting all PoE access switches in typical floors for WLAN AP.

4.2.2. The Core Switch shall be capable of providing DHCP Services for IP addresses distribution for mobile devices connecting to the network, and the required bandwidth, QoS, and policy-based routing to carry all sorts of information including video, voice, data, image, etc.

4.2.3. Each Core Switch shall provide a Gigabit Ethernet connection to each PoE Access Switch in typical floors.

4.2.4. The Core Switch shall support Layer 2 and Layer 3 switching and capable of providing the wired speed performance.

4.2.5. The Core Switch shall support basic IP unicast routing protocols, Static route, Routing Information Protocol (RIPv1, RIPv2), inter VLAN routing.

4.2.6. The Core Switch shall support Internet Group Management Protocol (IGMP) snooping and multicast and unicast storm control, Spanning-Tree Protocol.

4.2.7. The Core Switch shall support WebGUI Management for contractor's support, Access Control Lists (ACLs), DHCP Interface and SNMP.

4.2.8. The Core Switch shall support VLANs including support for IEEE 802.1Q and IEEE 802.1p.

### **4.3. PoE Access Switch**

4.3.1. The Access Switches shall be deployed to provide high performance interconnectivity between the Core Switches and the WLAN APs on typical floor and support Cloud-based management

4.3.2. The Access Switch shall consist of 8/12/24/48 x 10/100/1000Base-T Ethernet ports, with minimum of 1 x 1000Base-T / 1000Base-SX SFP Gigabit Ethernet uplink ports connected with the Core Switch.

4.3.3. The Access Switch shall be used for connecting the WLAN APs. The Contractor shall determine the Maximum power loading of the devices to be connected with the PoE Access Switches. The Contractor shall provide additional PoE Access Switch(es) if the total power loading summed up from the PoE devices exceeds the maximum power loading capacity of the PoE Access Switch.

4.3.4. The Access Switches shall support VLAN configuration.

4.3.5. The Access Switches shall be at wired speed.

4.3.6. The Access Switches shall be provided sufficient port density to meet all the required links.

4.3.7. The Access Switches shall support PoE and shall conform to IEEE 802.af / IEEE 802.3af standard, which delivers power over single copper UTP cable for WLAN AP.

4.3.8. The Access Switches shall support Internet Group Management Protocol (IGMP) snooping and multicast and unicast storm control, IEEE 802.1D Spanning-Tree Protocol.

4.3.9. The Access Switches shall support Virtual local area network (VLANs) including support for IEEE 802.1Q and IEEE 802.1p.

4.3.10. The Access Switches shall support WebGUI Management, Access Control Lists (ACLs), DHCP Relay and SNMP.



#### **4.4. Firewall**

- 4.4.1. The performance of the Firewall shall not be degraded with 100% Internet bandwidth utilization.
- 4.4.2. Network Address Translation (NAT) is required.
- 4.4.3. Access Control Policy, Content Filtering and Anti-Malware services are required.

#### **4.5. Service Requirements**

- 4.5.1. The Contractor shall be responsible for the total project management and shall assign a person to act as the single contact point to the School regarding all related activities of the contract. This single contact point cannot be transferred to a sub-contractor unless explicitly agreed by the School. Contractor should formally inform the School in writing if there is a change of contact point.
- 4.5.2. The Contractor shall provide rack/cabinet or use existing school rack if there is available rack space. All switches/firewall shall be properly installed into wall mounted cabinet or rack.
- 4.5.3. Cables shall be labelled with connected port and its device id.
- 4.5.4. All the equipment shall be labelled with an identifiable id.
- 4.5.5. The placement of cables, cabinets, racks and appliances shall be shown on the network diagram.
- 4.5.6. Switches and/or other appliances shall be properly installed into cabinet/rack with appropriate ventilation.
- 4.5.7. 13A power cord(s) shall be bundled with appliance(s).
- 4.5.8. Cable shall be properly set up onto appropriate cable management guide.
- 4.5.9. Contractor should make sure that the actual environment is suitable for the installation and operation of equipment with School agreement in advance, and make necessary suggestions, if any.

#### **4.6. Service Level Requirements**

- 4.6.1. The Contractor shall provide incident/problem report to the School within 5 working days after each incident and the resolution taken.
- 4.6.2. The Contractor shall derive mechanism, including forms and reference tables for measuring and recording the Service Level Measures, to ease the administration and monitoring by the School.
- 4.6.3. Advance notice by at least 2 weeks shall be given to the School prior to all scheduled maintenance. At most 4 scheduled maintenances per year are excluded from the calculation of Service Levels. No more than 1 hour service interruption or an agreed time slot is accepted for each scheduled maintenance.
- 4.6.4. Service Level, expressed in percentage, is the ratio of actual available time to the scheduled available time for the Wi-Fi network of the School and is calculated according to the following formula:

Service Availability Level = (Schedule Uptime within the month– Unscheduled Downtime within the month) / Scheduled Uptime within the month, where

Scheduled Uptime: The duration, in unit of minutes, for the Wi-Fi network of the School is scheduled to be available for the month. The duration will exclude the scheduled downtime, which is defined as duration agreed between the School and the Contractor during which the service may be deliberately made unavailable to users.

Unscheduled Downtime: The amount of time, in unit of minute that the services are unavailable due to equipment failure or other reasons under the responsibility of the Contractor.

#### **4.7. Service Level Rebates**

- 4.7.1. The Service Rebates to the School operate as liquidated damages for the performance fallen short of the target service levels over a period of one month. The service measures stipulated in 4.6 will be used to determine the Service Rebates in Service Availability (S1) and Service Resumption Time (S2).
- 4.7.2. The application of the Service Level Rebates adjustment to the monthly charge will commence with effective from the acceptance of the reliability test.

- 4.7.3. For each month, the Service Rebates for different service measures (S1, S2) will be calculated as below if the Contractor cannot meet the target Service Levels for the Wi-Fi network of the School under the availability agreed:

Failure Hour x [(Yearly Subscription Fees) / (365 x 24)] x 2, where

Failure Hour: The unscheduled downtime or the time to resume the network due to the failure of hardware or software which is provided by the Contractor. Failure Hour is calculated in the increment of 0.5 Hour.

- 4.7.4. The Service Rebates of the Wi-Fi network of the School, if any, will be paid by crediting the invoice of the following month.

#### **4.8. Helpdesk Service**

- 4.8.1. The Helpdesk Service shall maintain dedicated hotline, including phone, email and fax, for enquiries and complaints.
- 4.8.2. The Helpdesk Service shall answer enquiries and complaints originated from the School concerning the Service.
- 4.8.3. The Helpdesk Service shall operate from Mon to Sat 8:00 am to 6:00 pm.
- 4.8.4. The Helpdesk Service shall maintain call logs on enquiries and complaints. The information shall be included but not be limited to date, time, description of issues, contact information, and follow-up actions. The Contractor shall observe and comply with Personal Data (Privacy) Ordinance in handling all information relating to these enquiries and complaints.
- 4.8.5. The Contractor shall provide the following information concerning the Helpdesk service related to the implementation of the Service:
- Detailed information of the helpdesk office, such as address, phone number, fax number; and
  - Facilities, computer systems and equipment provided in the helpdesk office, such as private branch exchange (PBX), keyline telephone system (KTS), interactive voice response system (IVRS) and voice recording system.
- 4.8.6. The Contractor shall provide helpdesk staff with the necessary tools, including but not limited to hardware and software, related training for supporting the Service.
- 4.8.7. The Contractor shall not make use of the Helpdesk Service to transmit any message or conduct any activity which is not connected with the provision of the Service. The School

shall have the full discretion to determine whether any such message or activity is in breach of this provision. The Contractor shall forthwith stop transmitting such message or conducting such activity and refrain from doing it further once the School has notified the Contractor in writing or verbally of its determination.

#### **4.9. User Acceptance Test**

- 4.9.1. The Contractor shall conduct tests with the School before the service is officially accepted and subscription started. Tests shall include User Acceptance Test for reliability and performance of the hardware and software, and also the monitoring, operation support and all other aspects related to the Service Level Agreement of the Service. At least 14 school working days of trial period is expected for service monitoring after testing.
- 4.9.2. The contractor will be required to perform test making reference to the User Acceptance Test and System Test documents at [www.edb.gov.hk/ited/wifi900](http://www.edb.gov.hk/ited/wifi900). They include the types of testing to be performed, the requirements to be tested, the testing environment, testing tools and pass/fail criteria as reference to the Contractor.
- 4.9.3. The Contractor shall upon request by the School arrange briefings to the School and/or Responsible Parties of the School, with briefing materials, prior to the User Acceptance Test when required.
- 4.9.4. The Contractor shall provide detailed acceptance test plan and a step by step testing procedure with expected results against the requirements set out in this specification.
- 4.9.5. The Contractor shall provide, configure and set up the proper software and hardware for the School to carry out the User Acceptance Test.
- 4.9.6. The Contractor shall be required to carry out tests to demonstrate that the equipment and system meet the specification and other contractual requirements. The Contractor shall also be responsible for the timely preparation and compilation of all test schedules, test procedures and test reports.
- 4.9.7. The Contractor shall follow the agreed standards as laid down in this specification for the testing methods and procedures.
- 4.9.8. The Contractor shall submit a schedule of site performance and commissioning tests at least 3 working days prior to the commencement of the scheduled commissioning date.
- 4.9.9. Special tools, test equipment, test objects and simulators required for the demonstration of

either bench or commissioning tests shall be made available by the Contractor at no extra charge to the School.

4.9.10. All test equipment used by the Contractor shall be properly and periodically calibrated. Measuring standards used in calibration shall be traceable to international or national measurement standards, or to an industry recognized manufacturer's reference, subject to approval of the School.

4.9.11. Calibration procedures and results shall be documented and signed by certifying body where applicable. The Contractor may be requested to show evidence of calibration of test equipment by submission of copies of these calibration records prior to conduction of any tests.

4.9.12. The Contractor shall submit the User Acceptance Test report within 3 working days. The acceptance of the installation will only be granted after receiving a satisfactorily UAT report from the Contractor.

4.9.13. All equipment to be installed may be subject to inspection and bench testing. The Contractor shall meet the cost of deliveries for bench test. Notwithstanding, the Contractor shall have carried out the tests in accordance with the requirements and procedures stipulated in this specification and submitted the associated test reports for inspection.

#### **4.10. Termination of Service**

4.10.1. The School reserves the right to terminate all or part of the Service at any time if:

- The Contractor fails to meet the target service levels under Service Level Requirements for two consecutive months, or three months in total within the committed subscription period;
- The School suspects that unauthorized activity has occurred or is occurring in relation to the Service;
- The provision of the Service will cause the School to be in breach of any applicable law;
- The School reserves the right to terminate the contract at any time by giving written notice 10 working days in advance after the committed subscription period of service.

4.10.2. The Contractor shall provide to the School and implement the Exit Plan in accordance with:

- The Contractor shall provide to the School an Exit Plan with feasible arrangements before the committed subscription contract date;
- If the School considers the Exit Plan as not satisfactory, it will notify the Contractor with comments. The Contractor shall revise the Exit Plan by taking into consideration of the School's comments and provide to the School with five (5) working days after the date of receiving the School's comments. If the Exit Plan has been considered as not satisfactory for

three or more times, the School shall have the right to terminate this Contract by giving 10 days' notice in writing;

- Detailed exit procedures, disengagement timetable and actions to be taken by both the Contractor and the School for smooth termination of all or any part of the Service;
- The Exit Plan shall aim at enabling the School or its authorized parties to perform in substitution for the Contractor and to eliminate or minimize any disruption or deterioration of the Service. The Exit Plan shall contain, but not limited to the following information:
  - Detailed exit procedures, disengagement timetable and actions to be taken by both the Contractor and the School for smooth termination of all or any part of the Service;
  - Any information that is necessary for the School or a new service provider to continue the provision of the Service;
  - Details of the Contractor's personnel and other resources that will assist the School or the School's authorized parties during the handover;
  - All provisions of facilities such as trunks, conduits, cables, LAN ports and power points, shall be considered as fixture of the School venues and shall become the property of the School. The Contractor shall remove or keep those provisions according to the instruction of the School. Contractor can remove the network equipment such as switch, routers, and access points.
- The Contractor shall be responsible for the implementation and execution of the Exit Plan and shall ensure that the exit plan is carried out in a timely and orderly manner.

#### **4.11. Wi-Fi Project Reference**

4.11.1. The Contractor shall list out at least 50 Wi-Fi 100 and 200 Wi-Fi 900 reference cases with compliment letters. The compliment letters shall be provided during the tender submission.

4.11.2. The project references shall be provided during tender submission.

### **5. Technical Specification (Add-on Requirement)**

5.1 Provide a separated broadband internet for school ITED network (3 years contract), requirement as below:

- At least 1Gbps Bandwidth
- Unlimited internet access with symmetric upstream and downstream
- Web Security Protection
- Free router on-loan
- Free Fibre Installation and Service Provisioning,
- At least 16 fixed IP addresses

- Unlimited DNS mapping service with hosting(Free extra hosting service)
- 7x24 support service
- The Fibre Provisioning lead-time would be 28 days upon receiving from customer order.
- Web Content Filtering service
- DNS Hosting Service
- Free Local Domain Name(.edu.hk)
- Monthly rental would not change during contract period

## 6. Sub-Contracts

6.1 The Tenderer shall be the prime Contractor for all the services specified in Part X and Part Y of this contract. The Tenderer shall be the single point of contact for all contractual matters.

6.2 The Tenderer shall be liable for the performance or breach of any provisions of the contract by Sub-Contractors.

6.3 The Tenderer shall provide details of the sub-contract service for the Wi-Fi operation and maintenance of the Sub-Contractors in the format listed on Section 5 of Part Y. The hierarchy of the sub-contracting shall also be clearly stated below. If there are no Sub-Contractors, please enter nil.

6.4 No Sub-Contractor(s) specified in Section 5 of Part Y shall be replaced unless prior written consent has been given by the School.

6.5 The Tenderer shall ensure that the quality of the service rendered by the Tenderer shall not be affected due to any change of Sub-Contractors;

6.6 The Tenderer shall not be relieved from any of its obligations hereunder by entering into any sub-contract for the performance of any part of this contract. If request by the School, the Tenderer shall describe which part of the service shall be performed by the Sub-Contractor(s) in the sub-contract(s) between the tenderer and its Sub-Contractor(s).

## 7. Schedule of Work

7.1 The Contractor shall provide the service according to the following schedule.

Phase	Items	Starting Date	Ending Date	Service fee
I	Build up of WiFi network	After 15 July 2024	15 Aug 2024	0
II	Subscription of service	1 Sep 2024	31 Aug 2027	Quoted price

## **8. Delay of Schedule**

8.1 If the Contractor fails to provide any part of the Wi-Fi service which shall be ready for use in the School within 60 days after the target Ending Date specified in Section 8 of Schedule of Work then notwithstanding anything else contained in this Contract the School shall be entitled to terminate this Contract with forthwith by giving written notice to the Contractor and to recover from the Contractor the amount of all damages and loss suffered by the School resulting from such failure, including without limitation to any damages and loss resulting from the termination of related service orders.

8.2 Within one (1) week of the termination of this Contract, the Contractor shall collect its own Hardware and Software at his own cost after the contractor has removed the School Data in the Hardware.

8.3 The Contractor shall reinstate and make good the concerned area of the School to the satisfaction of the School after removal of the hardware.

## **9. Terms of Payment**

9.1 The subscription will be paid in arrears of each month during the subscription period.

## **10. Price Proposal**

10.1 The Service Provider is required to provide a breakdown on the service charges for each of the service items as set out in the Price Proposal at **PART B - PRICE SCHEDULE**. Failure in complying with this requirement will render the quotation disqualified.

10.2 Please note that due to resources constraint or other operational considerations of the School, the School has the absolute discretion to accept the whole of the Services or just part of the Services as listed out by items in the Price Proposal.

10.3 Set up cost will not be considered as a part of the cost in subscription mode.

## **11. Invitation for Quotations**

11.1 Quotations are invited for the execution of the whole of the Services as described in this document. Quotations for part but not all of the Services will not be considered.

11.2 Please provide two sets of quotation documents for processing of the quotation.



## **12. Tender Preparation and Submission**

12.1 The Service Provider is required to submit the following information and document.

- A Statement of Compliance to provide response that the quotation complies with all requirements stated in this Specification.
- Price Schedule
- No upfront cost or one off cost schools shall be paid throughout the entire subscription period.
- Proposed AP location mark on the Floor plan.
- Proposed Network infrastructure show on the Network Diagram.
- Implementation Plan.
- WLAN system certificates issued by OFCA.
- Product information including technical and descriptive literature and catalogues. Information provided by the manufacturer shall be able to substantiate that the products offered meet the mandatory Technical Specification.

## **13. Selection and Payment**

School is looking for a contractor based on the following criteria

- Proposed pricing
- Proposed solution
- Equipment and services level
- Case reference
- Other useful information

## **14. Enquiry**

For enquiry, please contact Mr. Tam Man Fai of the School at [tammanfai@sbchcsms.edu.hk](mailto:tammanfai@sbchcsms.edu.hk) or by phone at 92714666 / 27794016.

**Society of Boys' Centres Hui Chung Sing Memorial School**

**Subject: Broadband and WiFi Service for Society of Boys' Centres Hui Chung Sing Memorial School**

**TENDER FORM (to be completed in duplicate)**

**PART B - PRICE SCHEDULE**

**1. Price details for Standard Provision**

Standard Provision	3 years		School's choice on confirmation
	Monthly price	Annual price	
<b>WiFi Service Subscription (Requirement as stated in Part A)</b> <ul style="list-style-type: none"><li>- Total Number of Classroom: 11</li><li>- 3/F: Room 302, 303, 304</li><li>4/F: Room 402, 403, 404, 405, 406</li><li>6/F: Room 601, 602, 606</li><li>- The WiFi System shall support 20 concurrent connections (each room) at least</li><li>- A physically separated 1Gbps broadband line must be provided</li><li>- A pair of WLAN controller must be provided for redundancy purpose</li></ul>			
Total in HK\$			

**2. Price details for Add-on Services (Offer will be considered on itemized basis)**

Add-on Service		3 years		School's choice on confirmation
Item	Description	Additional monthly price	Additional annual price	
WiFi coverage for other areas	1) Hall include stage at G/F (80) 2) Room 101 at 1/F (20) 3) Room 102 at 1/F (20) 4) Room 201 and Room 202 at 2/F (40) 5) Room 203 at 2/F (40) 6) Room 204 at 2/F (40) 7) Office, Principle Room, Meeting Rooms at 2/F (40) 8) Room 301 at 3/F (20) 9) Room 305 at 3/F (20) 10) Room 306 at 3/F (40) 11) Room 307 at 3/F (20) 12) Room 401 at 4/F (20) 13) Room 407 at 4/F (20) 14) Room 408 at 4/F (20) 15) Room 409 at 4/F (20) 16) Room 501 at 5/F (20) 17) Room 502 at 5/F (20) 18) Room 503 at 5/F (20) 19) Room 504 at 2/F (20) 20) Room 505 at 5/F (20)			

Add-on Service		3 years		School's choice on confirmation
Item	Description	Additional monthly price	Additional annual price	
	21) Room 507 at 5/F (40) 22) Room 603 at 6/F (40) 23) Room 605 at 6/F (20) 24) Room 607 at 6/F (20) 25) Room 701 at 7/F (20) 26) Room 703 at 7/F (20)  Total 26 locations  Number in ( ) = number of concurrent connections supported at least			
Broadband Internet Service	- Separated broadband internet service for school ITED network - At least 1Gbps Bandwidth			
Pocket Wi-Fi Router	- 3 quantity of 4G(or above) Pocket Wi-Fi routers with 5GB mobile data plan per month.			
Monitoring of WiFi network	- Specific request on monitoring of WiFi network by the Contractor and the School.			
Authentication Method	- User account system being used by school - A landing page shall display on the			

Add-on Service		3 years		School's choice on confirmation
Item	Description	Additional monthly price	Additional annual price	
	user's browser when the user starts a browser session with the WiFi Service on the WiFi client device.			
Internet Content Filtering Service	- Cloud based Internet Content filtering profile in Hong Kong commonly adopted by most schools with ability to create black / White list filters and managed by vendors and school.			
WLAN system access control	- MAC address filtering can be supported.			
Integration of networks	- System integration with existing network with secure design.			
Support hours	- Support hours extend to 7 x 24			
Total in HK\$				
Total Cost for the Project (i.e. Section 1 + Section 2)				

### 3. Details of equipment to be proposed in the Buildup of WiFi network in the School

Items	Quantity	Model
WiFi Controllers		
Access Points		
Router/Firewall		

Core Switch		
Access PoE Switches		
LAN Cables		
Others (please specify)		

**4. Contractor Clarification for key requirements (To be filled by Contractor)**

Items	Complies (Yes/No)
<b>Access Point Certification Requirement:</b> The WiFi Access Point proposed is OFCA certified and copy of certificates issued by OFCA is attached to the proposals.	
<b>Access Point Standard Requirement:</b> The WiFi Access Point proposed support 802.11ax	
<b>Contract End Arrangement:</b> All provisions of trunks, conduits, cables, LAN ports and power points shall be considered as fixture of the School and shall become the property of the School. The Contractor shall remove or keep those provisions according to the instruction of the School. Contractor can remove the network equipment such as switch, routers, and access points.	

**5. The Tenderer to provide details of the sub-contract service involved in the proposal for the project implementation, service operation and maintenance in the format listed below**

Name of Sub-Contractor	Sub-contract service	Roles and responsibility

**6. The Tenderer to provide case reference of past deployment in WiFi100/WiFi900 with Sub-Contractors details in the format listed below**

Name of School	Name of Sub-Contractor	Sub-contract service	Roles and responsibility

**7. A floor plan (provided by the School) is attached.**

We / I understand that if we/I fail to supply the stores as offered in our / my tender upon accepting school's order, we are / I am prepared to pay the price difference to the school if such stores are obtained from elsewhere.

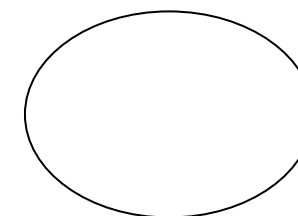
Name of Tenderer: \_\_\_\_\_

Name and Signature of Person authorized to sign Tender:

Name (in block letters): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



Company Chop

## **TENDER FOR BROADBAND AND WIFI SERVICE**

Name and Address of School : Society of Boys' Centres Hui Chung Sing Memorial School at 150 Pratas Street, Cheung Sha Wan, Kowloon

School Ref. No.: HCSMS/2324/ TENDER FOR Broadband and WiFi Service/ /T03

Tender Closing Date and Time: **12<sup>th</sup> July, 2024 12:00 noon**

### **Part I**

The undersigned hereby offers to supply all or any part of the items described in the tender schedule attached with the delivery term quoted therein against the date of a firm order placed by the school at the price or the prices quoted in the tender schedule free of all other charges and in accordance with any drawings and / or specifications provided by the school. In so doing, the undersigned acknowledges that all items not otherwise specified shall be in accordance with British Standard specifications where such exist; tender shall REMAIN OPEN FOR 90 DAYS after the Closing Date; and the school is not bound to accept the lowest or any tender and reserves the right to accept all or any part of any tender within the period during which the tender remains open. The undersigned also warrants that his Company's Business Registration and Employees' Compensation Insurance Policy are currently in force and that the items which his Company offers to supply do not to his knowledge infringe any patents.

### **PART II**

#### **RECONFIRMATION OF TENDER VALIDITY**

With reference to Part I of this tender document, it is reconfirmed that the validity of tender offered by this company remains open for 90 days from **12<sup>th</sup> July, 2024**.

The undersigned also agrees to accept the fact that once the validity of tender is reconfirmed, the pre-printed clause specified in the Company's tender forms in regard to this nature shall NOT apply.

### **PART III**

#### **SAFEGUARDING NATIONAL SECURITY**

The undersigned acknowledges that notwithstanding anything to the contrary in the quotation/tender documents, the school reserves the right to disqualify this company on the grounds that this company has engaged, is engaging, or is reasonably believed to have engaged or be engaging in acts or activities that are likely to cause or constitute the occurrence of offences endangering national security or otherwise the exclusion is necessary in the interest of national security, or is necessary to protect the public interest of Hong Kong, public morals, public order or public safety.

The undersigned also acknowledges that the school may immediately terminate the contract upon the occurrence of any of the following events:

- (a) this company has engaged or is engaging in acts or activities that are likely to cause or constitute the occurrence of offences endangering national security or which would otherwise be contrary to the interest of national security;



- (b) the continued engagement of this company or the continued performance of the contract is contrary to the interest of national security; or
- (c) the school reasonably believes that any of the events mentioned above is about to occur.

Dated this \_\_\_\_\_ day of \_\_\_\_\_ 2024.

Name (in block letters): \_\_\_\_\_

Signature: \_\_\_\_\_ in the capacity of \_\_\_\_\_ (state official position, e.g. Director, Manager, Secretary, etc.).

Duly authorized to sign tenders for and on behalf of: -

\_\_\_\_\_

whose registered office is situated at \_\_\_\_\_

\_\_\_\_\_ Hong Kong.

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

**TENDER FOR BROADBAND AND WIFI SERVICE**

**STATEMENT OF EXPRESSION OF NO INTEREST FOR TENDER SUBMISSION**

Name and Address of School: Society of Boys' Centres Hui Chung Sing Memorial School at 150 Pratas Street, Cheung Sha Wan, Kowloon

School Ref. No.: HCSMS/2324/ TENDER FOR Broadband and WiFi Service/ /T03

Tender Closing Date and Time: **12<sup>th</sup> July, 2024 12:00 noon**

Our company will not submit the tender for BROADBAND AND WIFI SERVICE.

Please explain the reason(s) :

☐ Unable to provide the stores or services as specified in the tender.

☐ Unable to meet the requirements or specifications as listed in the tender.

☐ Unable to submit the tender on time.

☐ Others: \_\_\_\_\_  
\_\_\_\_\_

Please tick (✓) in the appropriate box ☐.

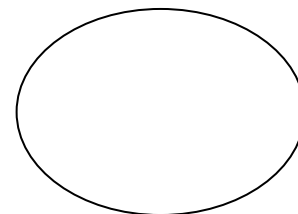
Name of Supplier: \_\_\_\_\_

Name and Signature of Person authorized to sign Tender:

Name (in block letters): \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_



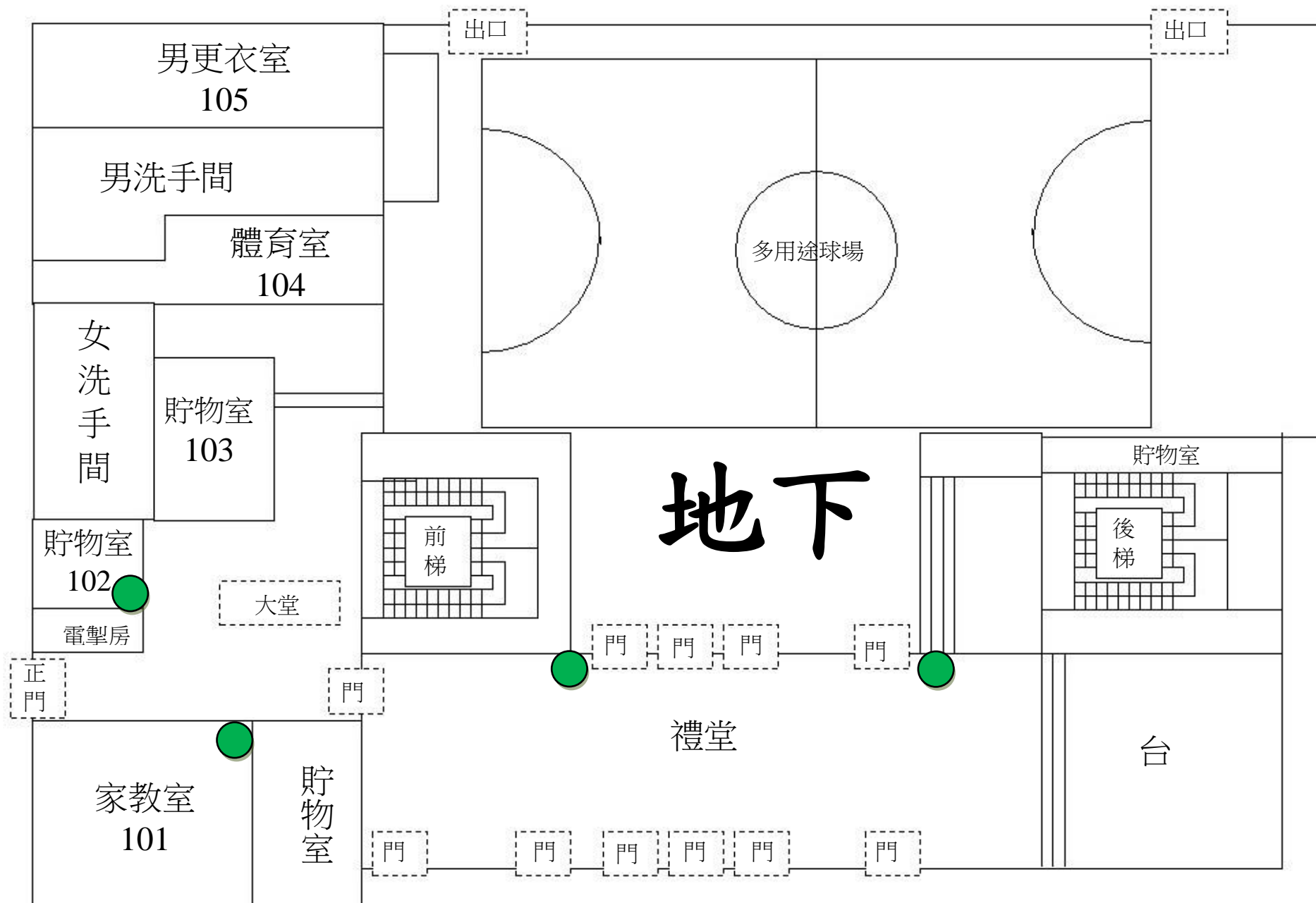
Company Chop



# 香港扶幼會許仲繩紀念學校

The Society Of Boys' Centres  
Hui Chung Sing Memorial School

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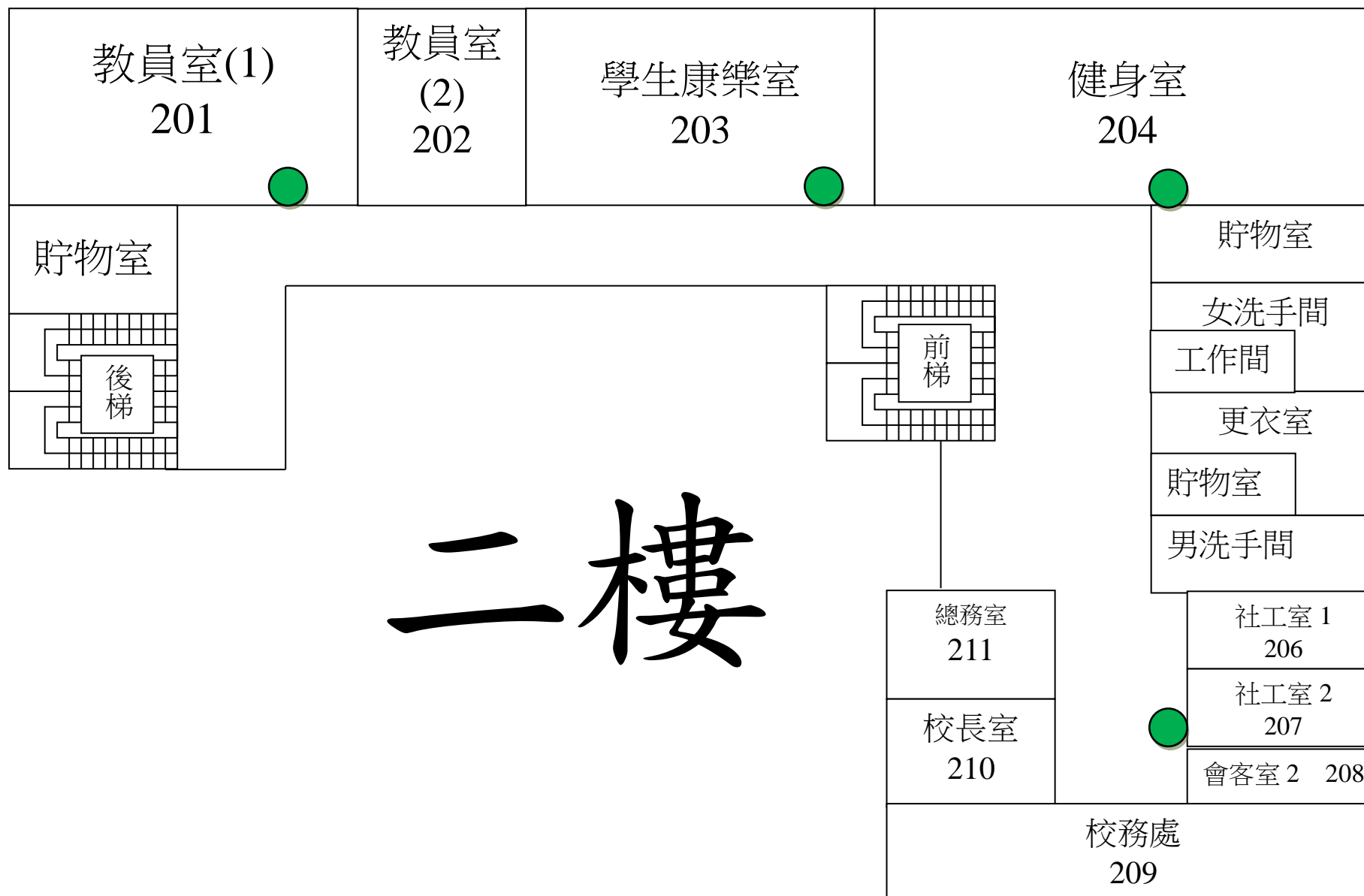




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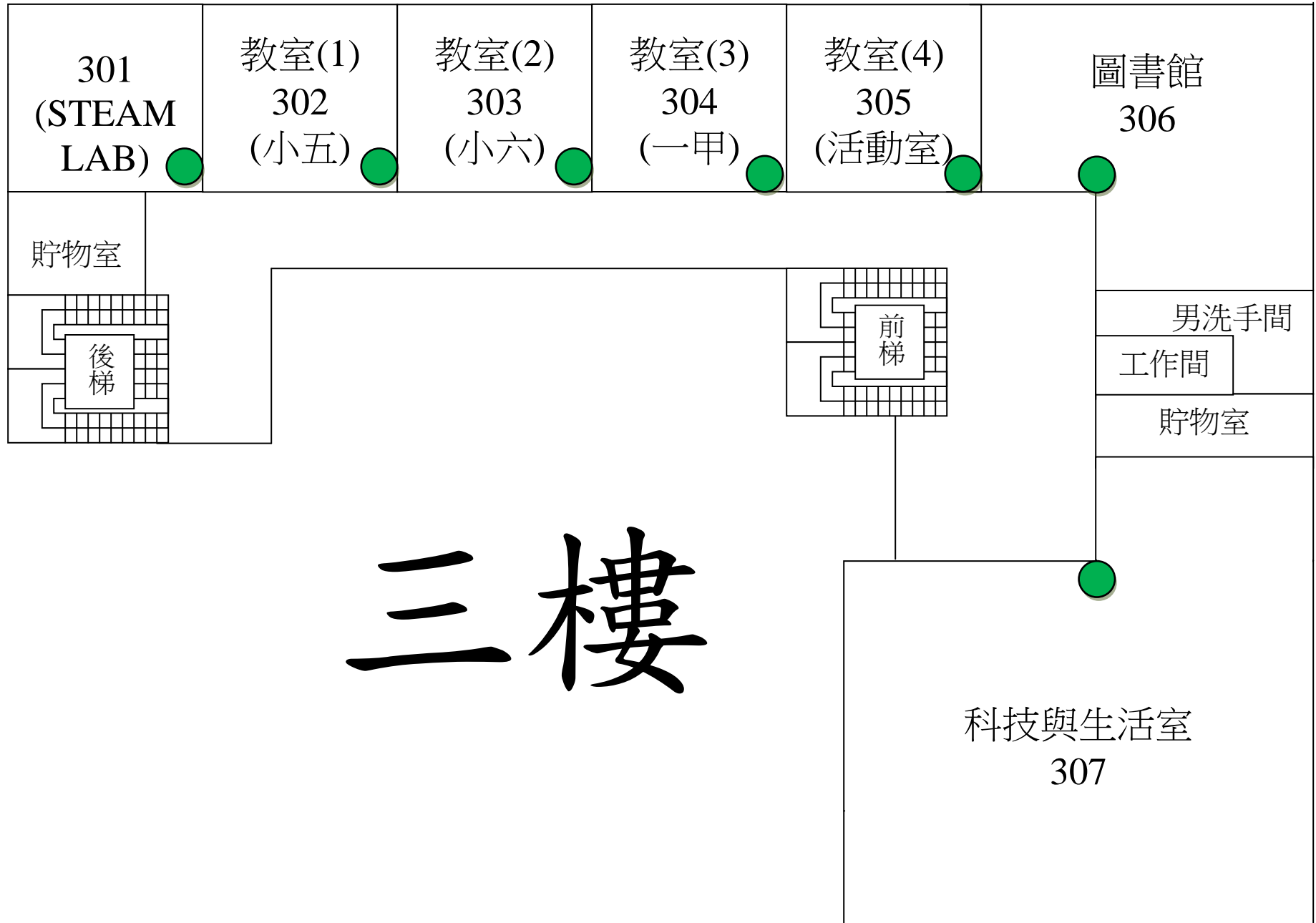




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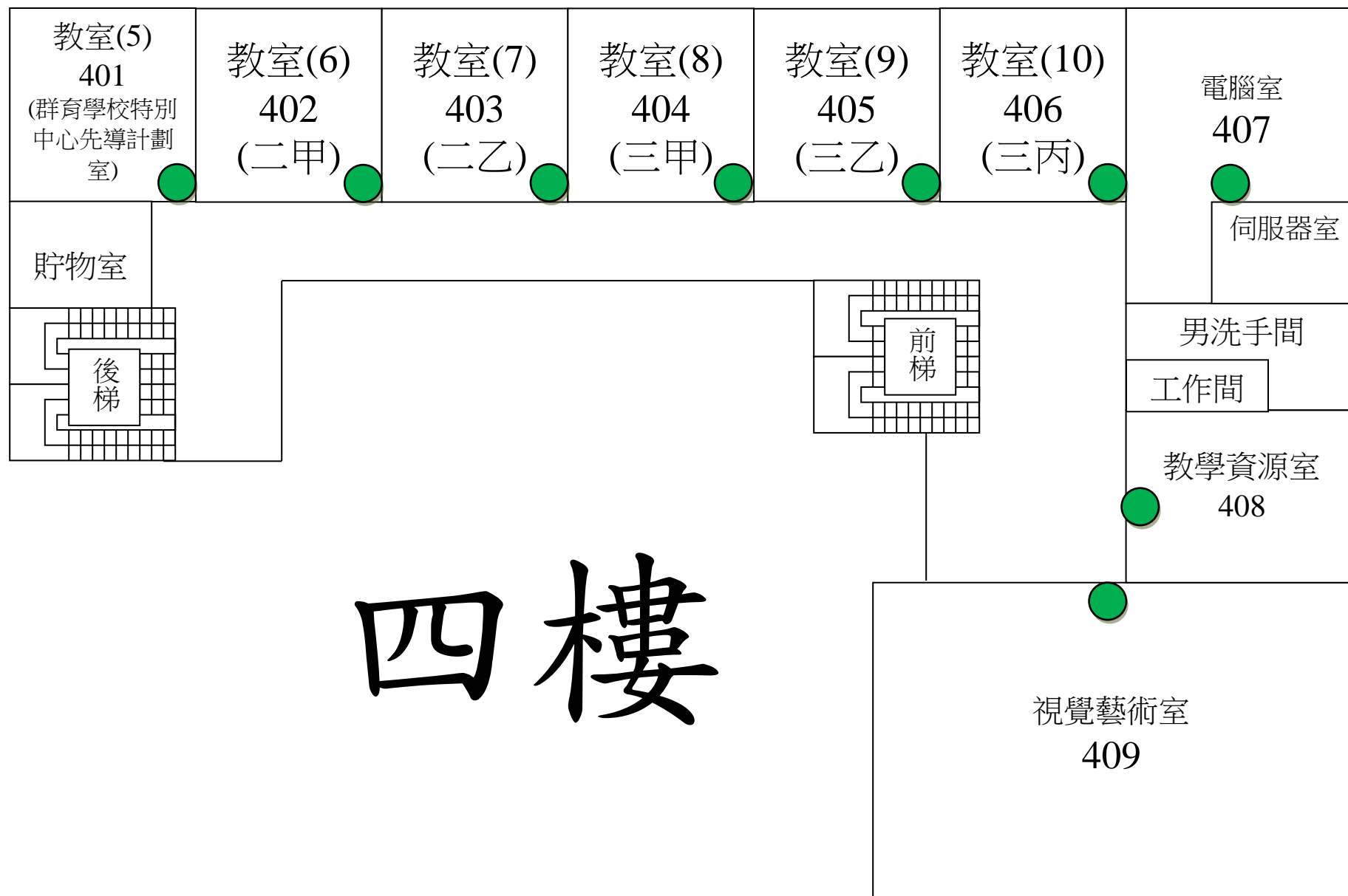




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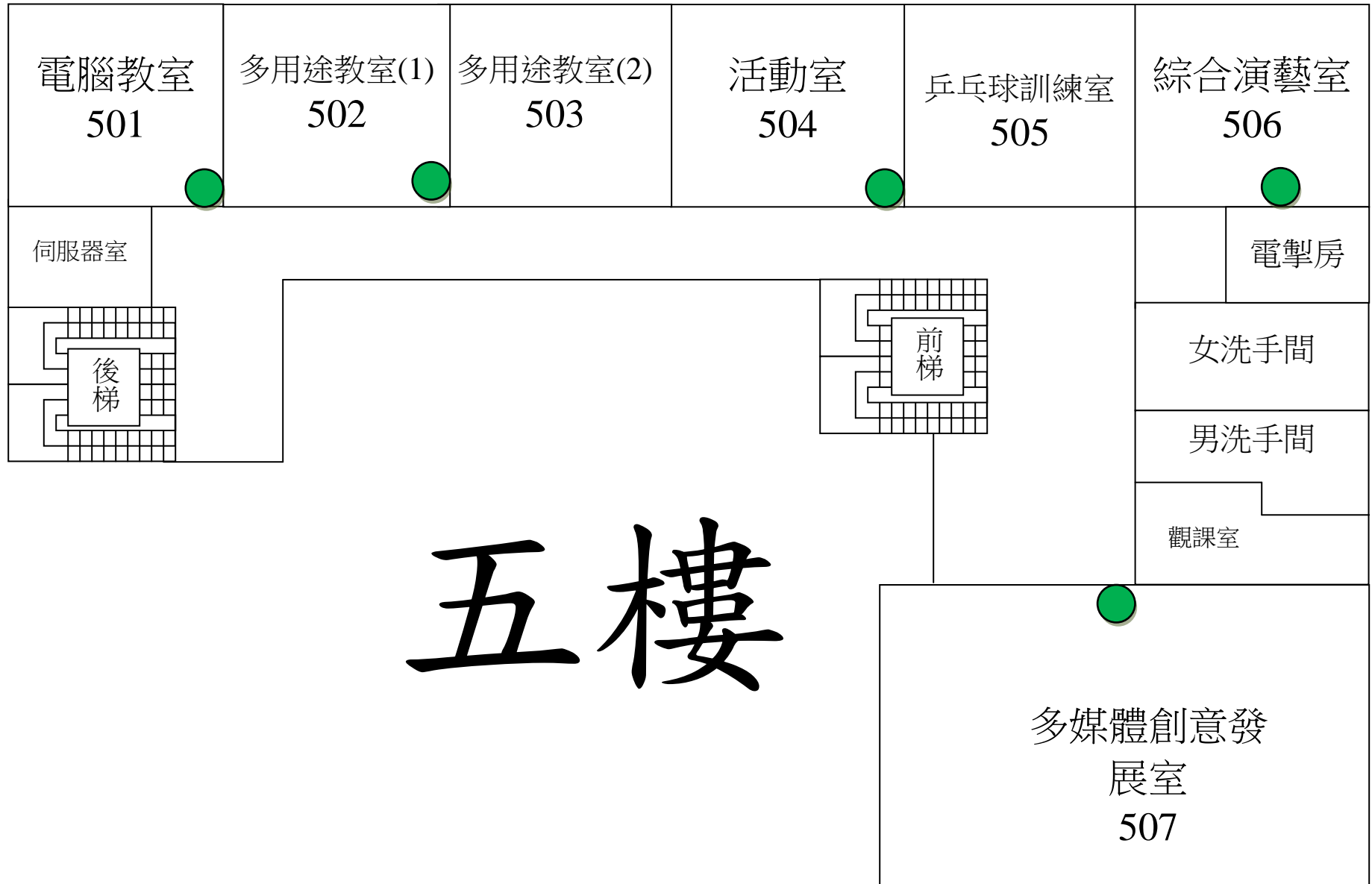




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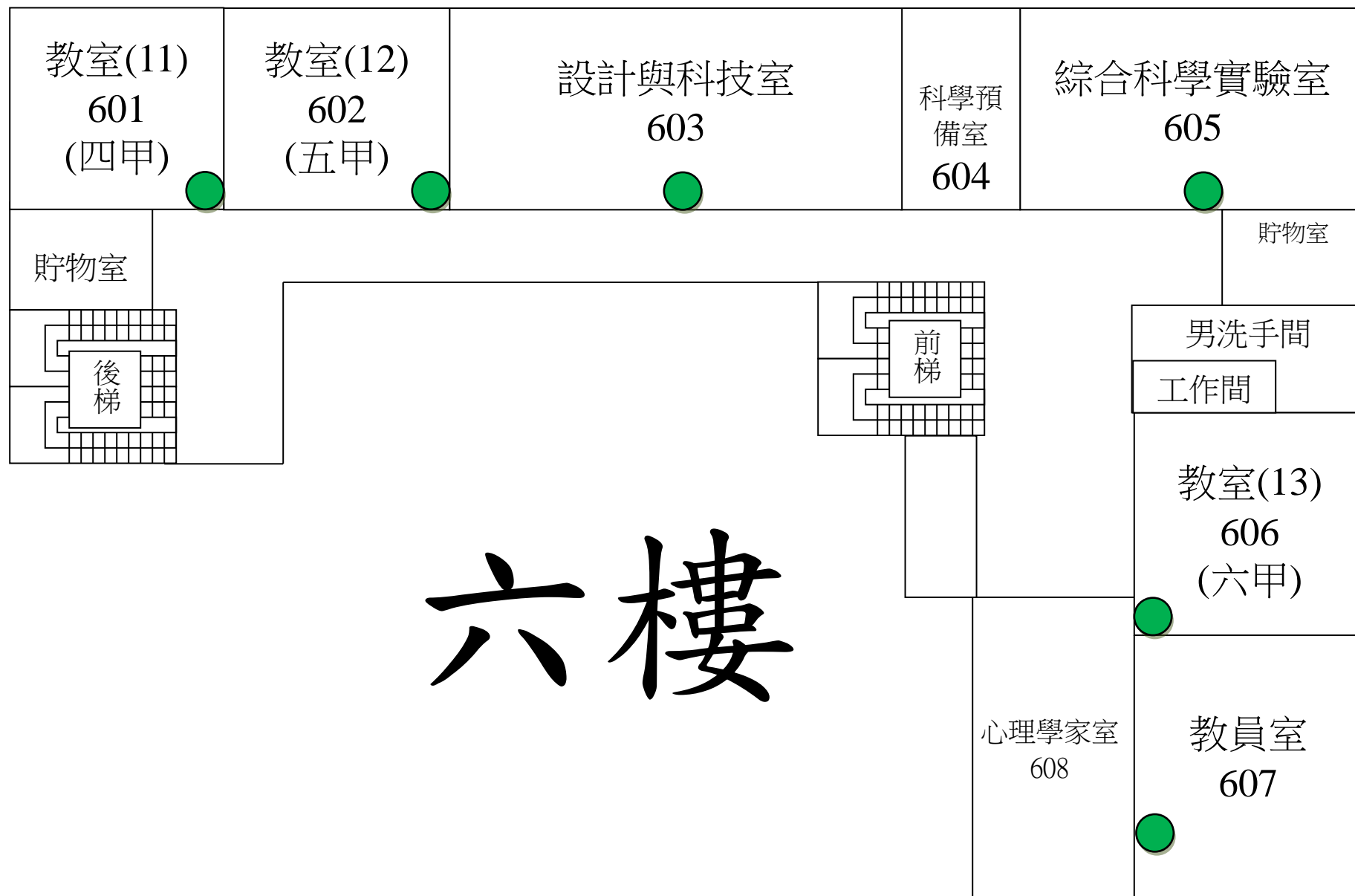




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