CAMPUS SERVICES

Computer and Information Systems

Industry Services

Library
The Polytechnic offers a wide spectrum of integrated information and computing services that are accessible via an extensive campus-wide high-speed Gigabit Ethernet network and IEEE 802.11a/b/g compliant Wireless LAN. Some of the student services offered by the Polytechnic are as follows:

- E-mail System (Windows Live)
- e-Learning System (Blackboard)
- Internet
- Student Administration System (PeopleSoft)
- CAD/CAM and PC labs
- Facility Booking System
- Student Notebook Support Service

All students are issued accounts to access the above services.

Besides providing campus-wide computing and network infrastructure support, the Computer and Information Systems Department maintains and supports various information systems to meet the academic, administrative and management needs of the Polytechnic. These include the following:

- Enterprise Performance and Information Reporting System (Business Object)
- Domino Workflow Applications
- Student Administration System (PeopleSoft)
- Employee Administration System (SAP)

The Department of Computer and Information Systems strives to provide an integrated digital environment for our students to access information and e-services for effective learning.
Continuing Education Centre (CEC)

**CEC Mission Statement:**
To provide opportunities for individuals to upgrade their knowledge and skills through lifelong learning programmes.

The Continuing Education Centre (CEC) of the Singapore Polytechnic was formed in 1979 to offer opportunities for our graduates to upgrade their skills and update their knowledge. It expanded to provide lifelong learning opportunities to the public through the provision of short courses, tailor-made or customised courses, talks, seminars and workshops.

It supports the government initiatives such as the Workforce Skills Qualification System of the Workforce Development Agency. So far more than 200,000 participants have attended our continuing education programmes.

The CEC provides a series of different programmes to enable individuals to keep on improving themselves in their fields of work and responsibility, as well as in areas that they have interest in. For employers, the centre provides services that include the customising of programmes to their specific training needs.

**Short Courses**

Short Courses are normally of a few days to six months duration covering topics from basic level to the advanced applications and theories. The emphasis is on hands-on training with the aim of transferring knowledge and skills to participants.

The courses are normally conducted in the evenings in campus for the convenience of working adults.

The courses are advertised on the first Monday of every month in the Straits Times and are also posted on our website at www.cec.sg

The Department of Industry Services plays a pivotal role in fulfilling the Polytechnic’s corporate goals especially in achieving excellence in education and training.

**Department’s Mission:**
To be a one-stop centre providing quality service to support industrial training, lifelong learning and technology development & transfer for our customers.

The Department comprises four centres, namely the Continuing Education Centre, the Industry Services Centre, the Technology Transfer Centre and the Technology Development Centre.
Customised Courses for Organisations (Tailor-Made Courses)

Singapore Polytechnic is prepared to customise courses to the specific training needs of companies and organisations. The list below provides examples of courses which we have customised for companies.

### Business and Management
- Convenience Store Operations
- Financial Accounting
- Management Accounting
- Small Business Management

### Building and Construction
- Air-Conditioning Systems and Maintenance
- Building Construction Safety Supervisors
- Formwork Safety for Supervisors
- Good Restroom Design
- Pavement Engineering
- Plumbing and Pipe-Fitting Appreciation
- Practical Applications of Land Titles (Strata) Act
- Project Management for Site Supervisors
- Project Planning and Management
- Property Maintenance and Facilities Management
- Working Principles and Maintenance of Cooling Towers
- Workshop for Safety Auditors

### Educational
- Making Teaching Interesting and Creative

### Engineering and Technology
- 3G Technology
- Boiler Attendant Course and Test
- Pharmaceutical Operations
- Basic Drive Technology
- Basic Electricity and Electronics
- Centrifugal Pumps
- CNC Machining Centre Process
- Computer Networks and Protocols
- Cosmetic Assembly and Packaging
- Current Good Manufacturing Practice
- Digital Signal Processing
- Electroplating
- Electrostatic Discharge Control
- Environmental Chemistry
- Foundation Fieldbus Technology
- Fragrance Creation
- Geotechnical Engineering
- Good Distribution Practice
- Introduction to Wireless Communications and Security Awareness
- Industrial Hydraulics
- Introduction to Composite Materials
- Introduction to Geometric Dimensioning and Tolerancing
- IT Security
- MATV System Design, Test and Maintenance
- Mobile Wireless Technology
- Network Forensics Analysis
- Network Security Fundamentals
- Operation and Maintenance of Steam Boilers
- Plastics Technology
- Process Instrumentation and Control Process
- Profbus Engineer
- Steam Engineers Courses and Exams
- Storage Technology
- Thermal Spraying
- Workplace Safety and Health Officers’ Training
- Wireless LAN Technology

### Language and Communication
- Basic Workplace Writing
- Basic Report Writing and Business Correspondence
- Communication Skills
- Effective Negotiation Skills
- Induction English Programme
- Intensive English
- Speaking and Presentation Skills
- Writing for the Web

### Food, Health and Life Sciences
- A Practical Approach to Food Safety
- Asian Noodle Technology
- Biosafety
- Biological Laboratory Safety
- Biological Laboratory Techniques
- Cold Chain Management
- Food Product Development
- Food Packaging Technology
- Hazard Analysis Critical Control Point (HACCP)
- Nutrition and Metabolism
- Phlebotomy
- Safe Practices in Food Manufacturing

### Maritime
- Advanced Oil Tanker
- Basic Safety Training
- Basic Tanker Operations and Safety Familiarisation
- Bridge Teamwork and Ship Handling
- Chemical Tanker Safety and Operations
- Container Ship Stowage Planning
- Crowd Management and Safety Training
- Crisis Management and Human Behaviour Training including Passenger Safety Training
- Crew Resource Management
- Electronic Navigation Systems
- Engine Room Resource Management
- GMDSS
- Graduate Mechanical Engineer
- Marine Electrical Control and Fault Diagnostic Course for Engineers
- Marine Insurance, Protection and Indemnity and Claims
- Oil Rig Commissioning
- Personal Survival Techniques
- Proficiency in Survival Craft
- Senior Engineer Assessment
- Shipboard Training and Assessment
- Ship Handling for Senior Officers
- Ship Resource Management
- Ship Security
- Ship Stability
- Specialised Training for the Operational Use of the ECDIS
- Tanker Familiarisation
- Vessel Resource Management

Training programmes for working professionals.
Seminars and Workshops

Seminars and workshops are normally held over a few days. A panel of speakers will be arranged to cover topics of current interest in the world of engineering and business. For workshops, there will be opportunities for hands-on training and demonstration.

These types of courses are popular with busy executives who can only spare a few days to acquire knowledge to keep themselves current.

Some of seminars and workshops conducted are:
- Finance for Non-Finance Managers and Professionals
- Import/Export Business and International Trade
- New Design for Clean Public Toilets

On-Line Courses

Singapore Polytechnic is a pioneer in offering on-line courses to its students, which was eventually offered to the public. The courses are offered through the Internet where participants can pursue the course of their choice any time and anywhere.

The following programmes are offered on-line:
- Certificate for Employment Agencies (Exams)
- Foreign Domestic Worker Employer’s Orientation Programme
- Powered Pleasure Craft Driving Licence (Theory Exams)
- Life Science A and B

Government-Initiated Programmes

The Centre supports the government efforts in ensuring that workers in Singapore are constantly upgrading their skills and knowledge to remain employable and relevant to the knowledge-based economy.

The programmes that the Centre is involved in are the Workforce Skills Qualification System (WSQ), Skills Redevelopment Programme (SRP) and the Industry Capability Upgrading Programme (ICAP).

Skills Redevelopment Programme

Singapore Polytechnic has launched various certification programmes which are supported under the Skills Redevelopment Programme. The programmes include the following:
- COC in Computer-aided Drafting
- COC in Computer-aided Drafting (Advanced)
- COC in Engineering Knowledge II (1st Grade)
- COC in Engineering Knowledge II (2nd Grade)
- COC in Engineering Materials I
- COC in Engineering Materials II
- COC in Mechanics I
- COC in Mechanics II
- COC in Supply Chain Operations
- COC in Thermo Fluids I
- COC in Thermo Fluids II

Refraction Courses

- WSQ Retail – Apply Safety and Security Practices
- WSQ Retail – Build Relationships with Customers
- WSQ Retail – Develop Ideas for Workplace Innovation
- WSQ Retail – Handle Merchandise Display
- WSQ Retail – Handle Product Storage Operations (Fresh Meat)
- WSQ Retail – Handle Product Storage Operations (Seafood)
- WSQ Retail – Interact with Customers
- WSQ Retail – Maintain Personal Presentation
- WSQ Retail – Manage and Improve Supply Chain Strategies
- WSQ Retail – Manage Promotional Activities

Skills Development Fund

The following courses are supported under the Skills Development Fund.
- AutoCAD 2006 Basics (2D & 3D)
- AutoCAD Customisation
- Basic Electricity and Electronics
- Basic Science and Art of Chinese Massage
- Building Construction Safety Supervisor Course
- Certificate of Competence in Biomedical Sciences I
- Certificate of Competence in Visual Basic with Database Application
- Certificate of Performance in Science and Art of Wine (Non Members)
- Certificate of Performance in Container Management and Dangerous Goods
- Certificate of Performance in Haematology
- Certificate of Performance in Human Resource Management and Industrial Relation
- Certificate of Performance in Logistics Information System
- Certificate of Performance in Marine Insurance and Environmental Management
- Certificate of Performance in Maritime Administration and Security
- Certificate of Performance in Maritime Economics
- Certificate of Performance in Port Agency
- Certificate of Performance in Port Planning and Bulk Operations
- Certificate of Performance in Port Planning and Liner Operations
- Certificate of Performance in Science and Art of Wine (Members)
- Certificate of Performance in Ship Management and ISM
- Certificate of Performance in Shipbroking, Chartering and Ship Sale and Purchase
- Certificate of Performance in Theory and Practice of Phlebotomy
- Class 1 Boiler Attendant Course
- Class 2 Steam Boiler Attendant Course
- COC in Computer-Aided Drafting
- COC in Computer-Aided Drafting (Advanced)
- COC in Engineering Knowledge II (1st Grade)

Experts invited to share their knowledge at seminars.
ISC Mission Statement:
To co-ordinate programmes for students to gain practical experience in the work place.

The role of the Centre is to bridge the interaction between industry and students. It administers programmes which bring the realism of industry into the campus.

The many services provided by the Centre are as follow:

1. It provides administrative support for the Industrial Training Programme (ITP) where students are attached to local or overseas enterprises for up to sixteen weeks. The ITP provides opportunities for students to practise what they have learnt and also to expose them to a realistic working environment.

2. It co-ordinates industrial attachment for academic staff to relevant industry.

3. It provides assistance in sourcing industry-sponsored projects for final-year students.

Courses for those working include maritime programmes.
Technology Transfer Centre (TTC)

**TTC Mission Statement:**
To contribute to the technological and business development of local enterprises in Singapore through consultancy services.

The Centre serves as a one-stop contact point for small and medium local enterprises to explore the various kinds of services provided by the Singapore Polytechnic which can help promote their technological and business development.

**Promotional objectives:**

1. To contribute to the technological and business development of local enterprises in Singapore through the provision of consultancy services, which taps on the physical resources and manpower expertise of the Polytechnic.

2. To facilitate technology and knowledge transfer in the development of commercial and engineering operations, processes and products to local enterprises through in-depth studies and applied Research and Development (R&D).

3. To provide consultancy and training in the application of modern technology to local enterprises so as to enhance the skills, capabilities and productivity of the workforce in Singapore.

Technology Development Centre (TDC)

**TDC Mission Statement:**
To promote technology development through applied research and development which taps on the physical resources and manpower expertise of the Polytechnic.

The Centre co-ordinates and promotes applied research and development (R&D) projects within the framework of the Singapore Polytechnic’s R&D Policy Statement:

Singapore Polytechnic is committed to the development of its R&D capability for the purpose of:
- Enhancing the quality of our teaching
- Transferring technology to and from industry

We shall concentrate our R&D efforts in the following areas:
- Life Sciences
- Electronic Systems
- Environmental Technology
- Information Technology
- Manufacturing Technology, and
- Transportation and Logistics

The Centre also co-ordinates with the various schools / departments in the Polytechnic to provide assistance to industry in applied R&D projects. Where possible, funding assistance from the Agency for Science, Technology & Research (A*STAR) and other external agencies is sought.

Besides staff R&D projects, the Centre also coordinates the Polytechnic Student Research Programme. Both programmes aim to generate R&D interest in our students and expose them early to an R&D environment.

Research and development work is given emphasis in Singapore Polytechnic.
The Library plays an important role in the student’s learning journey in the Polytechnic. Spread over two locations at the Main Library and the Business & IT (BizIT) Library, the Library provides a rich diversity of resources, information services and facilities. In this conducive environment, students are supported in their studies as well as encouraged to read widely on general subjects to broaden their outlook.

The Main Library, situated opposite the Administration building, occupies 5 floors in the main building and 3 floors in the annexe building. The main entrance is located in the main building on level 2.

The Main Library offers a comprehensive range of resources on course-related topics as well as a multi-disciplinary Colours collection useful for the General Elective Modules and for general reading.

The BizIT Library at Teaching Block 21 has a strong focus on business and management, information communication technology, multimedia design and development, and also a Colours collection.

Colours Zone

Located at Level 1, Main Library, the Colours Zone supports the General Elective Modules, and it covers a host of topics on the arts, humanities, entrepreneurship, creativity & innovation, history & culture, health & wellness, management, photography, music, languages, self-help, sports, travel, fiction, life stories, etc.

Living up to its name, the Colours Zone offers an ambient space for experiential learning, reading, discussion, music listening and internet surfing. Adding buzz to the zone are colourful graphics of vibrant poly life, book displays and photographic works of students.

Resources

The Library’s extensive resources consist of over 245,000 books, multimedia materials and periodicals; and 33,000 e-books, e-journals, e-databases and digitised student projects. The wide-ranging subjects include science and technology, the different fields of engineering, accounting, business, information technology, design and others.

Reading Corner

Sponsored by Singapore Press Holdings Foundation, the Reading Corner provides additional copies of the local newspapers, Financial Times and the International Herald Tribune for reading. It is located in the Reference Section of the Main Library.
ELISER – Your Information Portal

ELISER, or Electronic Library Information Services & Resources is the one-stop gateway to access library and global information resources via the Singapore Polytechnic website. Check it out at http://eliser.lib.sp.edu.sg

Here’s a snap-shot of key resources and services in ELISER:

E-Resources

- **E-books** are full-text online books covering topics on IT, business, engineering, science, technology and general areas. Major collections include Books24x7, Credo Reference, ebrary, FOODnetBASE, Gale Virtual Reference Library, NetLibrary, Referex Engineering, Safari Books Online and Wiley e-books.

- **E-Journals** are full-text online journals / periodicals essential for research, assignments, projects and case studies.


- **Student Project Reports** are accessible from the online catalogue in full text.

- **Internet Resources** on a wide range of topics are searchable by various search engines.

Services

- **Search Catalogue** allows users to search and save their favourite searches from the library’s Online Catalogue. It also provides a link to access other resources such as databases and the Internet.

- **MetaFind** is a one-stop search interface that searches quickly across several e-databases simultaneously.

- **My Loans** enables users to check their loan records, renew loans, reserve library materials and view their reading history. They can save their search terms and also edit their Alert Me profile to receive email alerts on new arrivals.

- **My Resources** consist of course materials used by the schools such as recommended textbooks, essential reading materials, student project reports and past examination papers.

- **E-Service Request Forms**
  - **Ask Librarian** is an online enquiry service for members to ask the librarians questions or to request for information assistance.
  - **Project Advisory Service** is a service for students and staff to make an appointment with the librarians for help in project work.
  - **Select Titles for Library Purchase** is a service for members to select titles from the listings to recommend the Library to purchase.
  - **Recommend Titles** provides a facility for members to recommend titles for the library to add to the collection.
  - **Online Database Search** is a service to request for a specific database search.
  - **Alert Me!** is a service for users to select topics of their interest and receive regular updates of the latest arrivals matching their subject profiles.
  - **Book Reviews** of publications are contributed by library members. Members may submit their reviews to the library.

Loan Services

- **Books** from the lending collection may be borrowed through self-service loan machines. Students can return library materials conveniently through the automated check-in station located outside the Main Library and BizIT Library.

- **Periodicals & Multimedia Resources** such as CD-ROMs, DVDs, Music CDs and videos are located at Level 2, Main Library as well as the BizIT Library. All
materials are available for short-term loan, except for newspapers and current issues of periodicals.

- **Recommended Textbooks** in the Red Spot Collection (Main Library) and Green-Spot Collection (BizIT Library) are available for short-term loan.

- **Reference Collection** which consists of core reference titles are to be used in the Reference Reading Room only.

**Information Services**

Librarians provide a range of customer-focused and value-added services. These include answering information enquiries, guidance in searching and using information resources, and compiling reading lists.

**Project Advisory Service**

Students may approach the librarians for help in project work on an individual or group basis. They are guided to find information resources on their research topics, how to format their project reports and cite references.

**User Education**

Various user education programmes are available to help students use the library effectively. New students attend library orientation and ELISER training to learn about the library’s resources and services. Library tutorials are integrated with subjects taught to familiarise students with the resources in their subject areas. They are also taught advanced searching skills to use e-resources such as e-databases. Through these programmes, the students acquire lifelong learning skills essential for their coursework and future careers.

**Main Library Facilities**

- **PC Zone** – Over 300 PCs are available on Level 4A for accessing e-learning modules, the internet and other campus network services. These facilities are also used for training students in library instruction. PCs may be booked through self-service ikiosks. Students using wireless notebooks may connect to the SP Wireless LAN network.

- **Rooms** of different sizes are available for project work, group discussions, personal study, meetings and AV group viewing. Project Rooms may be booked through the ikiosks in the library. Other room facilities can be booked at the Information Counter.

- **Quiet Zones** are located at Levels 3A and 4 for private study and reflective thinking.

- **Media Zone** is located at Level 3 within a sound-insulated area accessible via authorised RFID cards. Individual viewing stations as well as group viewing rooms are available for watching Cable TV, documentaries and DVD programmes.

- **Library Courtyard** is an outdoor extension of the library foyer with a refreshment kiosk. It provides the ideal setting for group discussion and activities.

**BizIT Library Facilities**

- **The BizIT Library** is well equipped with facilities such as PC zones with over 140 PCs, printing facilities, connection to SP Wireless LAN network, viewing booths for DVDs, a Quiet Zone and a photocopying room.

**Library Membership**

All staff and students are members of the Singapore Polytechnic Library.

Graduates of the Singapore Polytechnic may register as library members. Industrial and commercial firms, professional organisations, government departments and statutory boards may also join the Library as corporate members.

**Opening Hours**

**During Term:**

- **Main Library**
  - Monday to Friday: 8.30 am to 9.00 pm
  - Saturday: 8.30 am to 12.30 pm

- **BizIT Library**
  - Monday & Thursday: 8.30 am to 8.00 pm
  - Tuesday, Wednesday & Friday: 8.30 am to 6.00 pm
  - Saturday: Closed

**During Vacation:**

- **Main Library & BizIT Library**
  - Monday to Friday: 8.30 am to 6.00 pm
  - Saturday: Closed

*Project Advisory Service: a librarian guides students in their project work.*