

LABOUR MARKET HIGHLIGHTS 2009



Aug 2009

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GUIDE TO READING LABOUR MARKET HIGHLIGHTS 2009

A joint publication by MOM and WDA, the *Labour Market Highlights 2009* aims to help job seekers make more informed career choices. The *Highlights* provides information on jobs in demand across 16 industry groups within the manufacturing, services (including tourism) and construction sectors, and covers both executive and non-executive positions.

In addition to the listing of jobs in demand, the *Highlights* provides industry and occupational information that will be useful to jobseekers. These information include industry and jobs outlook, wage range, relevant academic qualifications and training pathways.

Wage range refers to the gross monthly wages that workers in the occupation can expect to receive. Wage data in the *Highlights* is estimated from MOM's Occupational Wage Survey 2009, as well as through MOM and WDA's industry engagements. As such, wage range in the *Highlights* is indicative only.

Relevant qualifications for the jobs in demand are obtained from job advertisements posted in ST Recruit and Classifieds, as well as through MOM and WDA's industry engagements. These qualifications are indicative, as some employers may prefer one of the qualifications listed over another.

Besides formal academic qualifications, there are various **training pathways** leading to nationally recognised qualifications that are widely accepted by employers. These include the Singapore Workforce Skills Qualifications (WSQ)¹, which caters to the training needs of adult workers and offers a wide range of qualifications from certificates to graduate diplomas. In addition, the *Highlights* provides information on training pathways which help jobseekers transit into new jobs or industries, such as WDA's Professional Conversion Programme (PCP)² and job placement programmes³.

Further information on data sources can be found on page 62.

¹ More information on the WSQ can be found at <http://wsq.wda.gov.sg/>

² More information on the PCP can be found at <http://app2.wda.gov.sg/web/Contents/Contents.aspx?ContId=765>

³ More information on WDA's job placement programmes can be found at <http://app2.wda.gov.sg/web/Contents/Contents.aspx?Id=67>

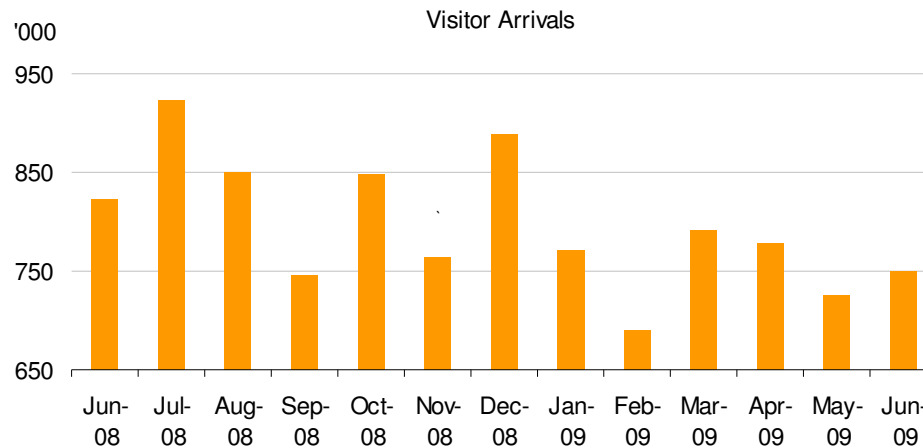
TOURISM – INTEGRATED RESORTS

Singapore's two Integrated Resorts (IRs) - Marina Bay Sands™ and Resorts World at Sentosa - will be iconic destination resorts offering world-class entertainment and leisure facilities to locals and visitors alike. The IRs will contribute significantly to Singapore's overall positioning as a premium must-visit destination for both leisure and business visitors. The IRs will generate significant economic benefits for Singapore, from the investments of their construction developments to the positive economic spin-offs when they are operational.

Resorts World at Sentosa, an integrated resort developed by Genting International, is set to be one of the top family holiday destinations. Located on Sentosa, this mega-resort will feature Southeast Asia's first Universal Studios theme park, a Marine Life Park and the region's first integrated destination spa. The resort will feature 6 hotels with a total of 1,800 rooms, world-class entertainment and a casino.

The other IR, Marina Bay Sands™ developed by Las Vegas Sands Corporation, will offer over 100,000 square metres of meeting and convention facilities, as well as three hotel towers with 2,600 rooms and a Sky Park with panoramic views of the bay. Entertainment facilities include two state-of-the-art theatres that will host a range of international and local shows, from Broadway musicals to Bollywood features and film award galas. The development will also feature shopping arcades and a casino, as well as an iconic ArtScience Museum and unique dining venues such as the floating pavilions in the Marina Bay.

The IRs are estimated to provide 20,000 jobs when fully operational and both have started to hire. The positions available range from managerial positions such as Casino Accounting Managers, Attractions Operation Managers and Pit/Cage Managers, to rank-and-file positions such as Croupiers, Theme Park Operators and Cage Cashiers.



TOURISM (INTEGRATED RESORTS) – EXECUTIVE JOBS

Job Title	Job Description	Wage Range*	Relevant Qualifications & Training Pathways
Casino Accounting Manager	Ensure that financial activities within the casino adhere to the regulatory framework. Ensure the integrity of accounting records and direct accurate reporting of the financial position of the casino.	NA	Degree in Business Administration / Accounting WSQ Diploma in Casino Gaming
Attractions Operation Manager	Ensure frontline and guest relation operations at the attraction run smoothly. Train frontline staff to provide excellent customer service. Work with exhibit coordinators and show managers to ensure shows run on schedule.	NA	Diploma / Degree in Business / Hospitality Management WSQ Diploma in Tourism PCP for Tourism (Attractions)
MICE Manager	Conceptualise and pitch MICE ideas, including sourcing for new business, preparing proposals and leading conference planners to execute the event.	\$3,200 - \$4,300	Degree PCP for MICE & Events - WSQ Diploma in Tourism (Specialising in MICE & Events)
Restaurant Manager	Maintain a budget and determine staff schedules. Keep the restaurant in compliance with health codes and work with the executive chef to determine menu items and pricing.	\$2,200 - \$3,700	GCE 'N' / 'O' levels WSQ Diploma in F&B Service
Technician (Attractions/Casino)	Maintain, troubleshoot and conduct safety inspections for attractions equipment. Install and service casino management system and electronic gaming equipment.	\$1,660 - \$2,600	Nitec / Higher Nitec in Mechanical / Electrical / Electronics / Computer Engineering
Pit Supervisor	Ensure efficient operation of table games, supervise croupiers and manage disputes professionally.	NA	Diploma WSQ Advanced Certificate in Casino Gaming
Cage Supervisor	Supervise cage cashiers, execute and record the movement of all cage and chip bank financial instruments and perform daily shift balancing.	NA	Diploma in Business Administration / Accounting WSQ Advanced Certificate in Casino Gaming

TOURISM (INTEGRATED RESORTS) – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range*	Relevant Qualifications & Training Pathways
Croupier	Operate table games such as blackjack, bacarrat and roulette, including dealing, determining winners, collecting losing bets and calculating payouts. Croupiers are also expected to Interact well with patrons.	\$1,800 ⁺	GCE 'O' Levels WSQ Certificate in Casino Gaming
Slot Attendant	Verify and authorise slot machine transactions, including payouts and fills. Ensure that slot machines are in optimum operating condition.	NA	GCE 'O' Levels WSQ Certificate in Casino Gaming
Cage Cashier	Cash in/out gaming chips, perform foreign currency exchange and conduct patron account transactions.	NA	GCE 'O' Levels WSQ Certificate in Casino Gaming
Theme Park Operator	Provide information about theme park facilities, entertainment options and rules & regulations. Monitor theme park activities to ensure adherence to rules and safety procedures.	NA	GCE 'O' Levels WSQ Certificate in Attractions
Retail Sales Assistant	Assist customers in their purchases, including describing product features, demonstrating its use and performing cashier duties.	\$1,270 - \$2,100	GCE 'N' / 'O' Levels in English and Mathematics WSQ Certificate in Retail Operations
Surveillance Operator	Monitor casino activities through close circuit television (CCTV)	NA	GCE 'O' Levels WSQ Certificate in Casino Gaming
Waiter / Waitress	Greet and escort customers to seats, take customers' orders, serve food and beverages and prepare itemised bills.	\$930 - \$1,500	GCE 'N' / 'O' Levels WSQ Certificate / Higher Certificate in F&B Service
Front Office Agent	Attend to hotel guests' needs, including managing check-ins/outs, settling hotel bills and attending to guest queries such as hotel facilities and local attractions.	\$1,290 - \$1,720	GCE 'N' / 'O' Levels / Nitec WSQ Certificate in Hotel and Accommodation Services

Job Title	Job Description	Wage Range*	Relevant Qualifications & Training Pathways
Room Steward / Chambermaid	Perform housekeeping duties, report maintenance issues for assigned rooms and refill work trolleys at the end of each day.	\$1,160 - \$1,720	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Hotel and Accommodation Services
Bell Hop	Provide quality service to guests, including opening doors for guests, helping guests with luggage and assisting guests in hailing taxis.	\$1,070 - \$1,450	GCE 'O' Levels WSQ Certificate in Hotel and Accommodation Services
Cook	Assist chefs in food preparation	\$800 - \$1,200	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Food Preparations WSQ Higher Certificate in Culinary Skills

Notes

* Wages for gaming positions are not available. Wage range for non-gaming positions in the IRs are estimated from similar occupations in other industries.

+ Marina Bay Sands has indicated that the starting salary of a croupier is around \$1,800, before tips.

TOURISM (INTEGRATED RESORTS) – JOB FEATURE

Croupier

Job Description	Wage Range	Qualifications & Training Pathways
Operate table games such as blackjack, bacarrat and roulette, including dealing, determining winners, collecting losing bets and calculating payouts. Croupiers are also expected to interact well with patrons.	\$1,800 (before tips)	GCE 'O' Levels WSQ Certificate in Casino Gaming

With the opening of the casinos at the Integrated Resorts (IRs), a sizeable pool of croupiers will be required to operate table games such as blackjack, roulette and baccarat. Croupiers essentially run the table – executing the game, determining winners, collecting losing bets and calculating payouts. Some croupiers may also be required to monitor patrons for fraud or cheating. In addition, croupiers are expected to interact and communicate well with patrons.

The working environment in the casino can be perceived to be fun and glamorous. However, it can also be fast-paced, stressful and physically-demanding. For example, croupiers are required to stand for long periods of time. They are also required to work rotating shifts and on weekends and public holidays.

Career advancement for croupiers depends on experience, performance as well as the ability and willingness of the individual to take on more responsibilities. Croupiers can expect progression to dealer inspectors and pit/cage supervisors with a minimum of 3 to 5 years' experience.

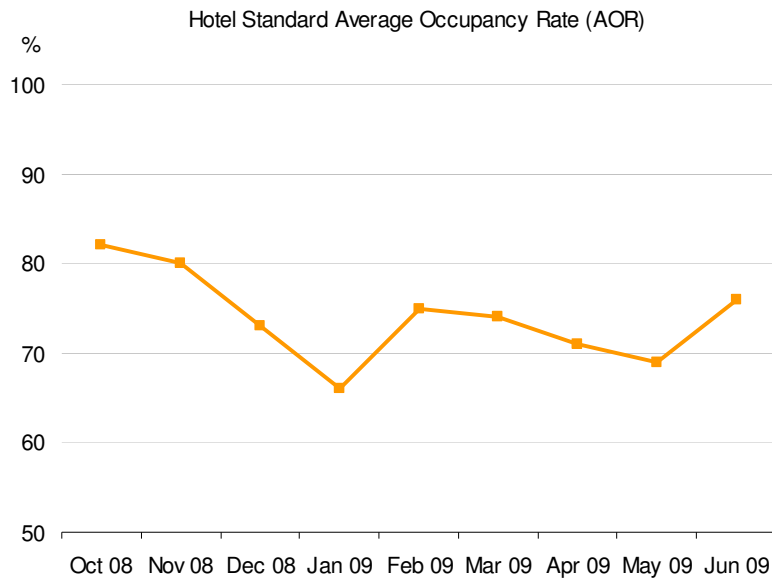
With both Marina Bay Sands™ (MBS) and Resorts World at Sentosa (RWS) opening soon, a substantial pool of croupiers are required to run gaming operations. MBS is looking to hire 4,500 gaming employees while RWS requires over 3,000 in total. Both the IRs have also stated that they are willing to consider individuals who do not have relevant gaming experience.

Jobseekers should therefore consider the croupier job, given its strong hiring, good salary and more importantly, clear progression path which provides opportunities for individuals to rise up the ranks.

TOURISM – HOTELS

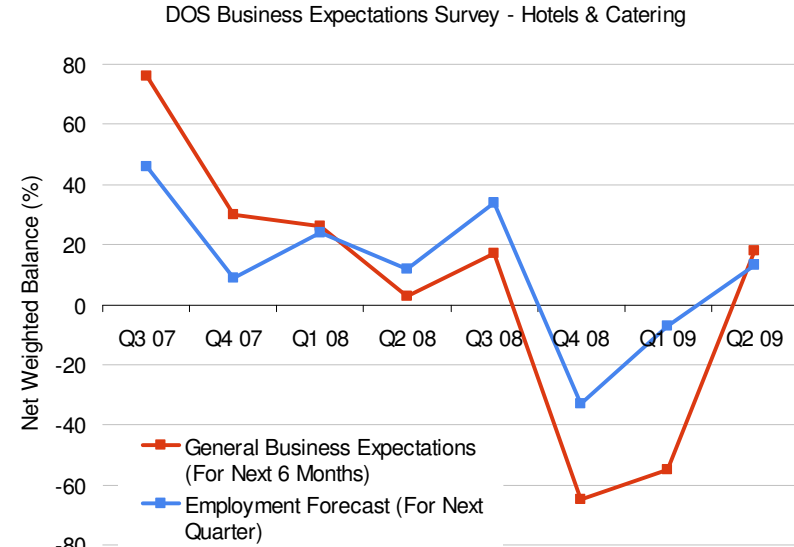
Over the last few years, Singapore's popularity as a tourism destination has increased tremendously. Better air connectivity, aggressive marketing and promotion as well as new and exciting tourist attractions such as the Singapore Flyer have contributed to the growth of the tourism sector. In 2008, Singapore hit a record high of S\$14.8 billion in tourism receipts, while visitor arrivals reached 10.1 million. The hotel industry plays a key role in supporting this growth by offering a range of accommodation types to suit all budgets and preferences, ranging from the budget-conscious backpacker to the luxurious business traveller.

However, the global economic recession which unfolded in the later half of 2008 has dampened travel sentiments and reduced visitor arrivals into Singapore. As a result, the average hotel occupancy rate in 2008 declined 6 percentage points from the preceding year to 81%. The recent H1N1 pandemic has also affected the hotel industry adversely. The Singapore Tourism Board (STB) has thus forecasted that tourism receipts will decline to between S\$12 and S\$12.5 billion in 2009, while visitor arrivals will also decline to between 9 and 9.5 million.



Nevertheless, there are still employment opportunities in the hotel industry. The opening of new hotels and expansion of existing ones has led to continued demand for manpower, especially at the rank-and-file level. The Integrated Resorts (IRs) for example will have 4,400 hotel rooms when completed and offer diverse job opportunities ranging from managerial positions such as reservation sales executives to rank-and-file positions such as bellhops and room stewards.

In the longer term, the outlook for the hotel industry is bright. New developments such as the International Cruise Terminal and Gardens by the Bay, as well as international events such as the Singapore 2010 Youth Olympic Games, are expected to boost tourist arrivals. To cater to the expected increase in tourist numbers, the supply of hotel rooms is slated to increase by more than 15,000 over the next 3 to 4 years. Numerous and exciting job opportunities will be available for those interested in creating a home-away-from-home experience for visitors.



TOURISM (HOTELS) – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Reservation Sales Executive	Handle group room reservations by tour agencies, corporate customers and VIPs. Promote hotel services for incentive travel and tour packages.	\$2,300 - \$2,600	GCE 'O' Levels WSQ Advanced Certificate in Hotel and Accommodation Services
Guest Services / Client Relations Executive	Register and assign rooms to guests, issue room keys. Handle front office duty including check-in and check-out of guests and manage complaints and feedback of guests	\$1,900 - \$2,100	Diploma in Hospitality WSQ Advanced Certificate in Hotel and Accommodation Services
Catering Sales Executive	Responsible for securing sales from food catering and finalizing quotations for bookings. Seek new clients and maintain positive relationships with existing clients to generate revenue for the hotel.	\$2,300 - \$2,600	GCE 'O' Levels WSQ Advanced Certificate in Hotel and Accommodation Services
Housekeeping Supervisor	Supervise room stewards/chambermaids and ensure high levels of hygiene and customer service. Prepare room cleaning schedules.	\$1,970 - \$3,220	GCE 'O' Levels WSQ Advanced Certificate in Hotel and Accommodation Services

TOURISM (HOTELS) – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Room Steward / Chambermaid	Perform housekeeping duties, report maintenance issues for assigned rooms and refill work trolleys at the end of each day.	\$1,160 - \$1,720	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Hotel and Accommodation Services
Bell Hop	Provide quality service to guests, including opening doors for guests, helping guests with luggage and assisting guests in hailing taxis.	\$1,070 - \$1,450	GCE 'N' / 'O' Levels WSQ Certificate in Hotel and Accommodation Services
Dish Washer	Clean dishes, cutlery and kitchen utensils and equipment.	\$870 - \$1,240	PSLE / GCE 'N' / 'O' Levels
Waiter / Waitress	Greet and escort customers to seats, take customers' orders, serve food and beverages and prepare itemised bills.	\$930 - \$1,500	GCE 'O' Levels WSQ Higher Certificate in F&B Service

TOURISM (HOTELS) – JOB FEATURE

Room Steward / Chambermaid

Job Description	Wage Range	Qualifications & Training Pathways
Perform housekeeping duties, report maintenance issues for assigned rooms and refill work trolleys at the end of each day.	\$1,160 - \$1,720	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Hotel and Accommodation Services

Behind the glitz and glamour of each hotel is a team of hardworking and dedicated room stewards/chambermaids who work quickly and effectively to uphold the hygiene and cleanliness standards of the premises. Apart from cleaning and maintaining guest rooms, room stewards/chambermaids may also be required to deliver ironing boards, cribs and personal daily use items to guests.

The job of a room steward/chambermaid is physically-challenging as they spend most of their time on their feet – lifting and pushing furniture, bending over to dust and sweep and lifting mattresses to change bed linens. They are also required to work weekends and on public holidays, since hotel rooms have to be maintained on a daily basis. However, this also means that the occupation offers good opportunities for jobseekers who prefer greater flexibility in their work schedule or are not able to commit full-time. Many hotels also make use of mechanisation and chemical cleaners to make tasks easier and less time consuming for room stewards / chambermaids.

With experience and proven performance, room stewards/chambermaids can progress up the ranks to supervisory positions such as housekeeping supervisors and executive housekeepers. They will take on greater responsibilities, including supervising and leading a team of room stewards/chambermaids, establishing and implementing operational procedures and standards for housekeeping, as well as maintaining inventories, budgets, payrolls and employee schedules.

There is immediate demand for room stewards/chambermaids, with existing vacancies in current hotels as well as new jobs from the opening of new hotels and expansion of existing ones. In the longer term, demand for room stewards/chambermaids is expected to remain strong as the hotel industry grows in tandem with the tourism sector in Singapore.

Jobseekers can take on the job of room steward / chambermaid as long as they possess the right attitude and passion, and are willing to work hard. In addition, opportunities for part-time work and temporary work are available.

TOURISM – MICE, TOUR & TRAVEL, ATTRACTIONS AND SPA

Meetings, Incentives, Conventions & Exhibitions (MICE)

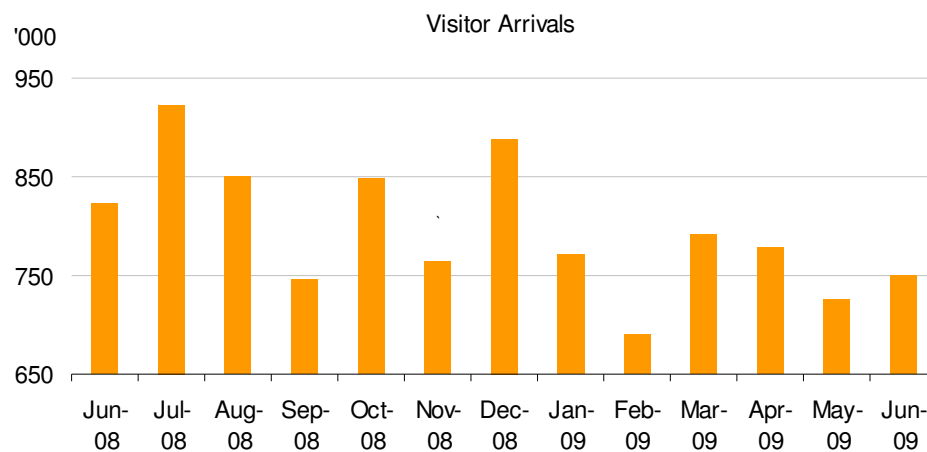
The MICE industry is critical to Singapore's tourism sector, as we seek to grow and strengthen our position as a leading convention and exhibition city in Asia. While the industry has been adversely impacted by event cancellations as companies cut budgets amidst the global economic recession, there are already signs of recovery and the long-term outlook for the industry is bright. Venue providers are beginning to fill their books with new events lined up to 2010. The opening of the Integrated Resorts (IRs) – with their own MICE teams and venues – will also help to grow the pie. MICE companies are therefore looking to hire for positions such as Sales/Business Development Managers and Event Organisers.

Tour & Travel

The tour & travel industry forms the cogs of the tourism sector. There are about 800 travel agents licensed in Singapore, providing myriad travel products and services such as inbound and outbound packages, accommodation reservations, ticketing and cruises. Although global travel demand has been dampened by the economic recession and the recent H1N1 pandemic, the tour & travel industry is expected to make a strong recovery as the global economy gradually recovers and travel sentiments pick up. Tour & travel companies are therefore looking to hire for positions such as Coach Captains, Ticketing Consultants/Supervisors and Travel Consultants.

Spa & Wellness

With the increasing popularity of lifestyle industries and spa tourism, the spa & wellness industry in Singapore has grown in recent years. The industry offers a wide range of products and services – day and destination spas, facial and health treatments etc – to stressed-out Singaporeans looking for rejuvenation, or tourists looking for a spa experience to enhance their visit. To support continued growth of the industry, Spa Therapists and Spa Consultants are needed.



TOURISM (MICE, TOUR & TRAVEL, ATTRACTIONS AND SPA) – EXECUTIVE / NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Sales / Business Development Manager (MICE)	Market company's services, achieve sales revenue targets and develop new sales opportunities by working with clients.	\$1,500 - \$4,600	Diploma PCP for MICE & Events (WSQ Diploma in Tourism - Specialising in MICE & Events)
Operations Executive (MICE)	Plan and execute conferences, exhibitions and other events - conference planners develop the conference agenda and invite speakers; exhibition coordinators bring together companies to showcase their products.	\$2,220 - \$2,880	Diploma PCP for MICE & Events (WSQ Diploma in Tourism - Specialising in MICE & Events)
Booth Builders (Carpenters) (MICE)	Build and set up the stands for exhibitions, stages for events, backdrops etc as required by the client.	\$1,500 - \$2,000	GCE 'O' Levels
Coach Captain (Tour & Travel)	Interact with customers and tour guides to make the trip as comfortable and informative as possible. Responsible for keeping to schedules and adhering to the tour's itinerary.	\$1,500 - \$2,000	GCE 'O' Levels WSQ Certificate in Tour & Travel Services
Ticketing Consultant (Tour & Travel)	Responsible for all aspects of airline ticketing that includes the issuing and distribution of all air ticket documentation.	\$1,800 - \$2,200	GCE 'O' Levels WSQ Certificate in Tour & Travel Services
Travel Consultant (Tour & Travel)	Handle air ticketing and reservations, attend to customers' enquiries and promote tour packages.	\$1,200 - \$3,000	GCE 'O' Levels WSQ Certificate in Tour & Travel Services
Admission / Attraction Host (Attractions)	Plan and prepare tours. Interact with visitors and provide information on the attraction.	\$1,200 - \$1,700	GCE 'O' Levels WSQ Advanced Certificate in Attractions
Show Presenter (Attractions)	Host shows at attractions to give visitors an engaging experience.	\$1,200 - \$1,700	GCE 'O' Levels WSQ Certificate / Advanced Certificate in Attractions

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Spa Therapist (Spa)	Perform spa treatments on customers.	\$1,500 - \$2,320	GCE 'O' Levels WSQ Certificate in Spa Services
Spa Consultant (Spa)	Perform spa treatments on customers. Also advise on different spa services depending on customers' profiles and needs.	\$1,200 - \$1,500	GCE 'O' Levels WSQ Certificate in Spa Services

TOURISM (MICE, TOUR & TRAVEL, ATTRACTIONS AND SPA) – JOB FEATURE

Sales / Business Development Manager (MICE)

Job Description	Wage Range	Qualifications & Training Pathways
Market company's services, achieve sales revenue targets and develop new sales opportunities by working with clients.	\$1,500 - \$4,600	Diploma PCP for MICE & Events - WSQ Diploma in Tourism (Specialising in MICE & Events)

The intensely-competitive business landscape in the MICE industry means that sales/business development managers are crucial to the operations of MICE companies. Their detailed job scopes depend on the organisation, set-up and size of the company, but typically cover advertising, marketing, promotions and sales. Most importantly, sales/business development managers are expected to direct the company's sales programme towards capturing business opportunities.

Sales/development managers must be able to work under pressure, as deadlines and goals have to be met despite constantly changing schedules. Long hours, including weekends and evenings, are also common. On the other hand, sales/business development managers often have the opportunity to travel to attend meetings or events.

Experience, ability and leadership are important requirements for career progression. Due to the importance and high visibility of their jobs, sales/business development managers have good opportunities for advancement after acquiring sufficient experience. Some may even become top executives in MICE companies.

Although the MICE industry has been affected adversely by the global economic downturn, there are still immediate vacancies available for sales/business development managers. Long-term demand for the occupation is also expected to be strong as the MICE industry grows along with a recovery in the broad economy.

MICE companies are open to hiring mid-career switchers as sales/business development managers if they possess the necessary skills and have the right disposition and passion for the job. The recently introduced Professional Conversion Programme (PCP) for MICE will also allow interested jobseekers to get on-the-job training with MICE companies as well as classroom instruction on MICE operations, thereby preparing them for supervisory and middle-management positions.

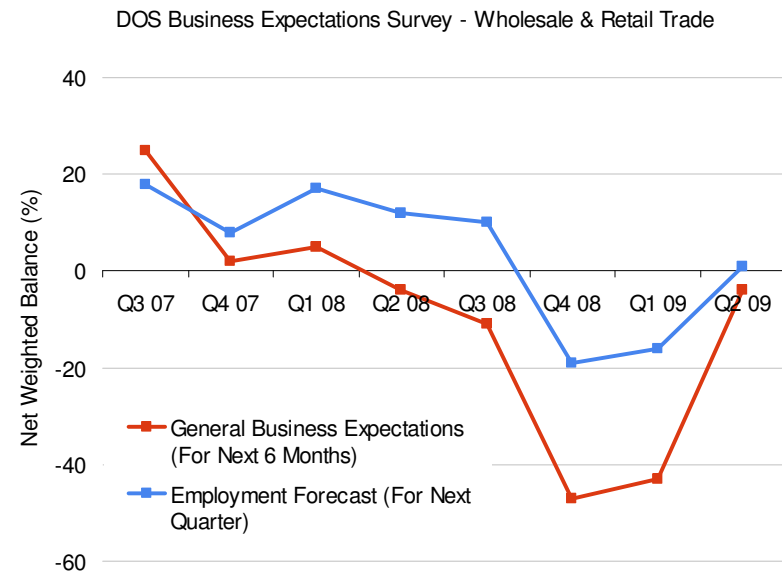
FOOD & BEVERAGE AND RETAIL

Singapore's vibrant food & beverage (F&B) and retail industries have made us a leading gastronomic and shopping capital in Asia-Pacific. In F&B, we offer diverse cuisines and dining experiences as well as a flourishing nightlife for residents and visitors alike. Our retail landscape has also been greatly enhanced with the opening of new malls, rejuvenation of the Orchard Road shopping belt and upcoming opening of the Integrated Resorts (IRs).

However, with the performance of both industries closely tied to consumer confidence and the health of the general economy, F&B and retail companies have been adversely affected by the economic downturn. Business activities and volume have slowed down as consumers cut back on discretionary spending and visitor arrivals decline.

Despite the decline in business activities, employment opportunities are still available in both industries. Existing job vacancies, expansion of current outlets and new openings mean that manpower demand remains strong. F&B and retail companies continue to hire, particularly for rank-and-file positions such as Waiters/Waitresses, Cooks, Kitchen Helpers, Retail Assistants and Cashiers.

In the longer term, the outlook for the F&B and retail industries is bright. The opening of new shopping malls such as Orchard Central and ION Orchard – featuring novel F&B concepts as well as new international brands setting up their flagship stores in Singapore – has injected a buzz into Singapore's F&B and retail scene. In addition, other projects in the pipeline, such as 313@Somerset and The Mandarin Gallery, will add another 5.8 million square feet of F&B and retail space between 2009 and 2013. The opening of the IRs will also boost visitor arrivals to the country, benefiting the F&B and retail industries. All these developments will further enhance Singapore's reputation as one of the leading gastronomic and shopping destinations in the world.



FOOD & BEVERAGE AND RETAIL – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Chef	Sous chefs manage and supervise staff in food production, coordinate production schedules and estimate amount of raw materials required / Chefs de partie support the sous chef and manage one section of the kitchen	\$1,600 - \$3,000 (Chef de Partie)	GCE 'O' Levels WSQ Advanced Certificate in Culinary Skills (Supervisory) WSQ Diploma in Culinary Management PCP for Culinary Chefs (WSQ Diploma in Culinary Arts)
		\$3,000 - \$4,000 (Sous Chef)	PCP for Pastry Chefs (WSQ Diploma in Pastry & Baking)
Restaurant Manager	Maintain a budget and determine staff schedules. Keep the restaurant in compliance with health codes and work with the executive chef to determine menu items and pricing.	\$2,200 - \$3,700	GCE 'N' / 'O' levels WSQ Diploma in F&B Service WSQ Higher Certificate in F&B Service WSQ Advanced Certificate in F&B Service Diploma in F&B Service
Retail Sales / Branch Manager	Maintain day-to-day oversight of department or branch operations. Establish goals and procedures for the department/branch and coordinate activities with other branches.	\$2,700 - \$4,660	Degree / Diploma PCP for Retail Professionals (WSQ Diploma in Retail Management)
Visual Merchandiser	Create window and interior displays in shops and department stores. Develop floor plans to optimise store layout. Prepare for promotional events.	\$1,500 - \$1,800	Diploma in Interior Design / Fashion Design / Retail Management / Visual Communications

FOOD & BEVERAGE AND RETAIL – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Kitchen Assistant	Prepare ingredients and sauces, slice vegetables and meats under the direction of chefs and cooks.	\$750 - \$1,770	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Food Preparations WSQ Certificate in Food Hygiene WSQ Higher Certificate in Culinary Skills
Cook	Assist chefs in food preparation	\$800 - \$1,200	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Food Preparations WSQ Higher Certificate in Culinary Skills
Dish Washer	Clean dishes, cutlery and kitchen utensils and equipment.	\$870 - \$1,240	PSLE / GCE 'N' / 'O' Levels
Waiter Supervisor / Captain	Supervise a team of wait staff, ensuring the smooth flow of service delivery as well as make decisions pertaining to service recovery.	\$1,200 - \$1,800	GCE 'N' / 'O' Levels WSQ Higher Certificate in F&B Service WSQ Advanced Certificate in F&B Service Diploma in F&B Service
Waiter / Waitress	Greet and escort customers to seats, take customers' orders, serve food and beverages and prepare itemised bills.	\$930 - \$1,500	GCE 'N' / 'O' Levels WSQ Higher Certificate in F&B Service
Bartender	Serve drinks and light snacks in bars and F&B outlets. Maintain inventory of liquor and bar supplies.	\$1,500 - \$2,080	GCE 'N' / 'O' Levels WSQ Higher Certificate in F&B Service
Cashier	Receive payment, return change, issue receipt and handle returns and exchanges.	\$1,050 - \$1,550	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Retail Operations

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Retail Sales Supervisor	Oversee retail sales assistants in delivering satisfactory customer service. Review inventory and sales records, inspect merchandise and coordinate sales promotions.	\$1,600 - \$2,740	GCE 'N' / 'O' Levels Retail Apprenticeship Programme (WSQ Advanced Certificate in Retail Supervision)
Retail Sales Assistant	Assist customers in their purchases, including describing product features, demonstrating its use and performing cashier duties.	\$1,270 - \$2,100	GCE 'N' / 'O' Levels in English and Mathematics Retail Apprenticeship Programme (WSQ Certificate in Retail Operations)
Retail Sales Promoter / Demonstrator	Explain the features of products and demonstrate their use to encourage customers to buy the product.	\$1,300 - \$1,940	GCE 'N' / 'O' Levels Retail Apprenticeship Programme (WSQ Certificate in Retail Operations)

FOOD & BEVERAGE AND RETAIL – JOB FEATURE

Retail Sales Assistant

Job Description	Wage Range	Qualifications & Training Pathways
Assist customers in their purchases, including describing product features, demonstrating its use and performing cashier duties.	\$1,270 - \$2,100	GCE 'N' / 'O' Levels in English and Mathematics Retail Apprenticeship Programme (WSQ Certificate in Retail Operations)

With increasing competition for the consumer dollar, retail sales assistants play an important role in assisting customers to find what they are looking for, or interest them in alternative products. Retail sales assistants are therefore required to have good product knowledge and to provide courteous and efficient service to enhance the customer's shopping experience. In addition, retail sales assistants may also be required to take up additional responsibilities such as processing payment, opening and closing cash registers, restocking supplies and monitoring for theft.

The job of a retail sales assistant can be physically challenging as they are typically required to stand for long periods of time. In addition, retail sales assistants are required to work weekends, on public holidays and during peak periods. However, this also means that the occupation offers good opportunities for jobseekers who prefer greater flexibility in their work schedule or are not able to commit full-time.

With experience and proven performance, retail sales assistants can progress up the ranks to supervisory and managerial positions. As these individuals gain further experience and seniority, they may also have the opportunity to move to positions of greater responsibility within corporate headquarters, such as purchasing managers.

There is immediate hiring for retail sales assistants this year, with existing vacancies in current retail outlets and new jobs from the opening of new shopping malls. In the longer term, demand for retail sales assistants is expected to remain strong as the retail industry recovers along with the broader economy.

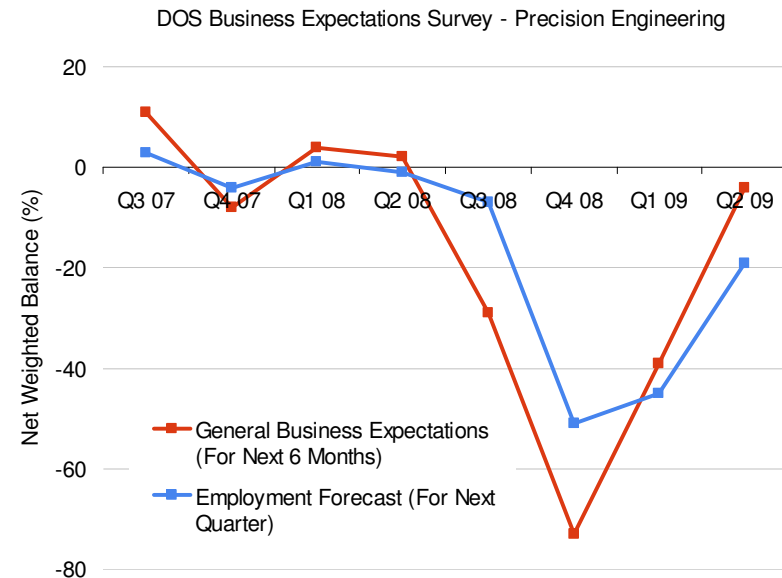
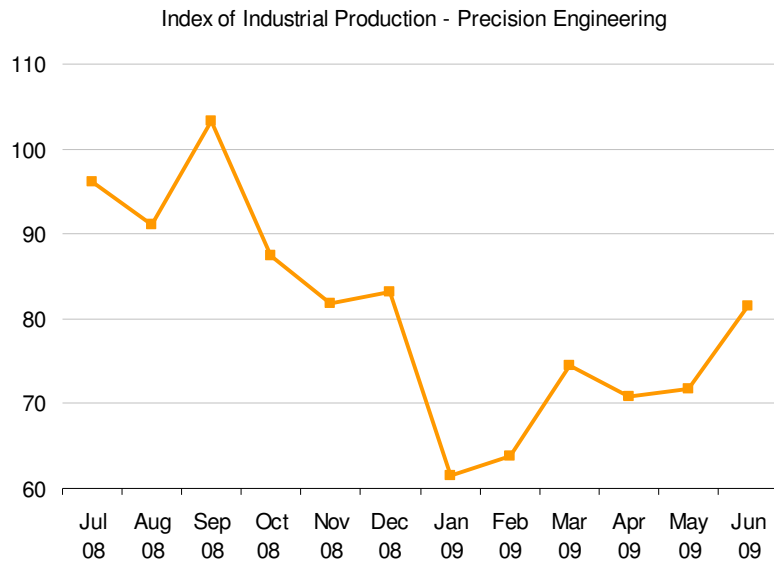
Jobseekers embarking on career switches can easily make the transition into the retail sales assistant job, as long as they have the right disposition and passion for the job. Opportunities for part-time work, temporary work and atypical working hours are also abundant in the retail industry. In addition, the spread of retail outlets from the heartlands to the shopping belts mean that retail sales assistants can choose from a wide range of workplaces. Overall, the retail industry poses good employment opportunities for students, back-to-work women, older workers and those seeking to supplement their income.

PRECISION ENGINEERING

The PE industry forms the backbone of Singapore's complex mix of manufacturing activities. With its highly specialised skills sets, precision engineering is an integral part of the manufacturing chain for all kinds of sophisticated products, ranging from the smallest semiconductor wafer to cutting-edge medical devices, advanced aerospace components and the largest drill bits used in oil exploration.

Today, Singapore's unique strengths in PE are key reasons for our global leadership position in products such as refrigeration compressors (10% of global output), hearing aids (30% of global output) and wire / ball bonders (70% of global output) used in the semiconductor industry. The PE industry also contributes significantly to our economy, accounting for S\$22.3 billion in manufacturing output in 2008. Employment increased by 2.0% in 2008 to 101,000, making up 25% of the total manufacturing workforce.

The PE industry has not been spared from the global economic downturn, as PE output contracted by 7.5% in 2008 in tandem with the decline in the electronics industry. However, PE firms producing higher value-added (VA) components for the aerospace, healthcare and medical industries have weathered the downturn better thus far. Looking ahead, the PE industry is poised to grow along with a recovery in the global economy. Growing wealth and an expanding middle class in China and India is likely to fuel future demand for consumer electronics, automotive and mechanical products. Accordingly, EDB plans to develop Singapore into a Centre of Precision Engineering Excellence and targets to double the value-add of the industry to S\$9.6 billion by 2018, alongside output of S\$28 billion. Continued efforts to grow the industry will also result in 5,000 new PE jobs being created over the next 4 years.



PRECISION ENGINEERING – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Manufacturing Engineer Manager	Plan, setup, modify, optimise and monitor the manufacturing process by working with mechanical engineers and electrical engineers to ensure all product and system requirements are taken into account from initial product conception to completion of the final product.	\$4,500 - \$8,150	Diploma / Degree in Mechanical Engineering PCP for Manufacturing Operations Specialists (PE WSQ Graduate Diploma in Manufacturing Operations Management)
Application / Mechanical Manager	Plan, direct, coordinate and budget for activities concerned with construction and systems. Participate in the conceptual mechanical development of a project.	\$4,500 - \$8,150	Diploma / Degree in Mechanical Engineering PE WSQ Specialist Diploma in Precision Engineering
Quality Assurance Manager / Automation & Control Engineer	Oversee the QA dept functions and the conduct of failure investigation and resolution with relevant parties (both internal and external).	\$4,640 - \$8,480	Diploma / Degree in Mechanical Engineering PCP for Precision Engineering Professionals (PE WSQ Graduate Diploma in Precision Measurement and Characterisation)
Mechanical Engineer	Responsible for organizing highly complex activities for the design, implementation and maintenance of engineering projects. Assist with developing, evaluating and improving manufacturing methods.	\$3,150 - \$4,890	Diploma / Degree in Mechanical Engineering PE WSQ Diploma in Machinery & Systems
Design Engineer (Mould & Tool)	Supervise tool & die makers, including assigning jobs, planning schedules, checking design and drawings and site checking. Use CAD system as a design tool to achieve higher productivity in the generation of design and production information.	\$2,900 - \$4,570	Diploma / Degree in Mechanical Engineering PE WSQ Diploma in Mould Tool Making

PRECISION ENGINEERING – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Tool & Die Maker	Work with advanced machinery to manufacture moulds and dies. Make use of technical drawings and specifications to ensure quality requirements are met.	\$2,180 - \$3,030	GCE 'N' / 'O' Levels / Nitec in Precision Engineering WSQ Certificate in Precision Engineering (Die & Mould Tool Making)
Tool & Die Designer	Conceptualise and design the complex tool and die used in the manufacture of plastic and metal components.	\$2,670 - \$3,500	Nitec in Precision Engineering Diploma in Mechanical Engineering WSQ Higher Certificate in Precision Engineering (Die & Mould Tool Making)
Machining and Tooling Technician	Interpret programming codes utilized on CNC machines. Apply mathematical formulas to shop practices and machining concepts.	\$1,760 - \$2,520	GCE 'N' / 'O' Levels / Nitec in Precision Engineering WSQ Higher Certificate in Precision Engineering (Manufacturing & Production)
Machinist / Operator	Work with mechanical hand tools and advanced machinery to mass manufacture components and modules for various industries.	\$1,410 - \$2,770	GCE 'N' / 'O' Levels / Nitec in Precision Engineering WSQ Certificate in Precision Engineering (Manufacturing & Production)
Automated Material Handling System (AMHS) Technician	Provide first level support to the production shop-floor for all AMHS-related issues and perform routine maintenance.	\$1,100 - \$1,930	Nitec / Higher Nitec in Electronics / Mechatronics / Electrical Engineering / Mechanical Engineering

PRECISION ENGINEERING – JOB FEATURE

Tool & Die Designer

Job Description	Wage Range	Qualifications & Training Pathways
Conceptualise and design the complex tool and die used in the manufacture of plastic and metal components.	\$2,670 - \$3,500	Nitec in Precision Engineering Diploma in Mechanical Engineering WSQ Higher Certificate in Precision Engineering (Die & Mould Tool Making)

Tool & die designers conceptualise and design the complex tool and die used in the manufacture of plastic and metal components. These components are used in a wide range of high value products such as medical devices and consumer electronics.

While the PE industry has been adversely affected by the global economic downturn, PE firms continue to hire tool & die designers to fill existing vacancies and build up their long term design capabilities. Looking ahead, demand for tool & die designers is expected to grow strongly as various industries require increasingly complex components for their state-of-the-art products. Tool and die design capability will therefore be the core capability that differentiates PE firms from their competitors. Skilled tool & die designers with accumulated PE experience will thus be highly sought after.

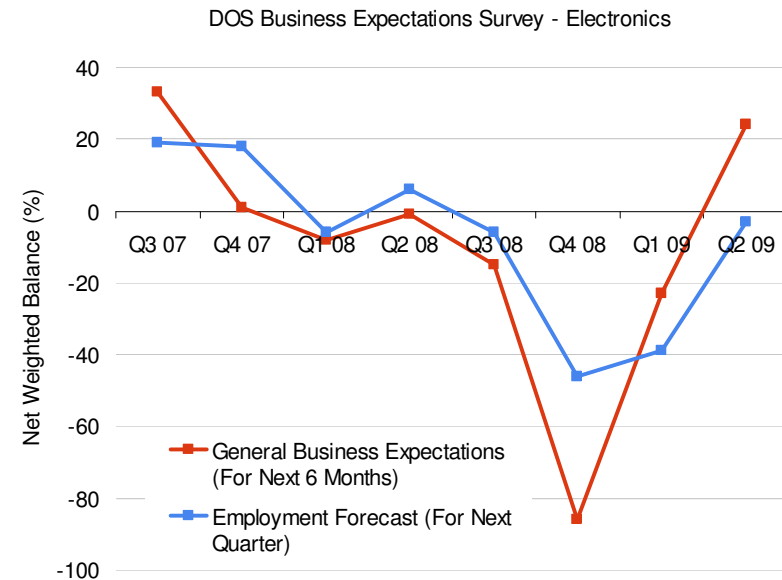
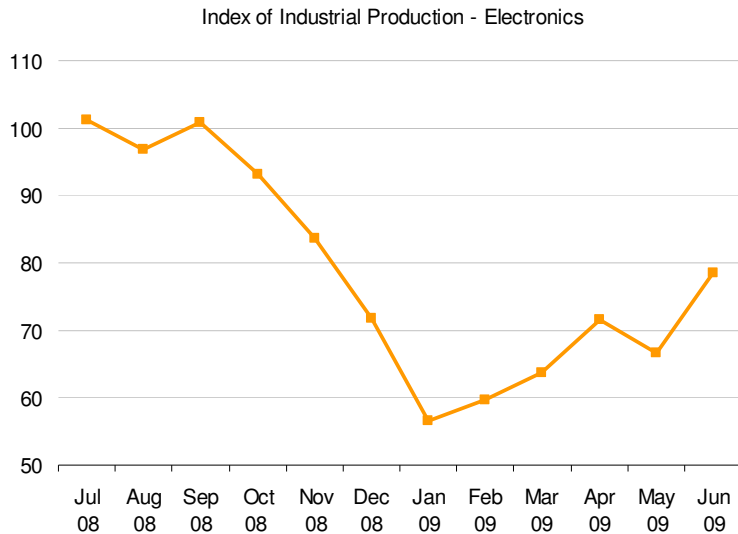
Jobseekers with a Nitec in Precision Engineering or Diploma in Mechanical Engineering can consider the tool & die designer job, given its strong outlook and respectable wages of between \$2,670 and \$3,500. Tool & die makers with strong PE skills sets can also upgrade their skills by obtaining the WSQ Higher Certificate in Precision Engineering (Die and Mould Tool Making), which will help them progress to the position of tool & die designers.

ELECTRONICS

The electronics industry is the backbone of Singapore's manufacturing sector, generating about S\$68 billion (projected for 2008) in output and employing about one fifth, 92,000 workers, of the manufacturing workforce.

The global economic recession has adversely affected the electronics industry, as global consumer demand declined sharply amidst job losses and household deleveraging in the US and Europe. As a result, output of Singapore's electronics industry shrank 7.1 % in 2008, compared to a 4.1% growth in 2007. However, the bottoming out process of the electronics industry appears to have begun. Business sentiments for the second half of 2009 in the electronics industry have improved, with companies expecting higher orders and exports and higher levels of production.

In the longer term, prospects of the electronics industry remain positive. Rising wealth creation and an expanding middle class in China, India and other emerging economies will fuel strong demand for electronics products. Singapore's electronics industry has also attracted a constant flow of exciting new investments, including the world's largest and most advanced 300mm wafer production facilities by Siltronic Samsung Wafer. Of the S\$18 billion in fixed asset investment (FAI) Singapore received in 2008, electronics accounted for almost 17%, second only to the chemicals industry. When fully implemented, the S\$3 billion in electronics FAI is expected to contribute S\$1.1 billion in value added (VA) per annum to Singapore's GDP and create over 2,400 new jobs.



ELECTRONICS – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Integrated-Circuit (IC) Designer	Design the circuits embedded within electronic chips. IC designers seek to design ICs with more functionalities and better performance, taking into consideration cost, size and power consumption.	\$3,000 - \$5,500	Degree in Microelectronics Engineering / Mechatronics / Electronics Engineering / Electrical Engineering PCP for Integrated Circuit Design Engineers
Process Engineer	Devise and implement the processes for fabricating equipment components and modules. Ensure that processes are efficient and implement new quality improvement tools.	\$3,000 - \$4,500	Degree in Physics / Chemistry / Electronics / Microelectronics / Electrical Engineering / Chemical Engineering Certified WSQ Wafer Fab Engineer
Process Integration Engineer	Process the set-up, characterizations, robustness, correlation and integrated responses on process blocks for all technologies and products. Work on mature and new technologies and render support for continuous process improvements.	\$3,000 - \$4,500	Degree in Physics / Chemistry / Electronics / Microelectronics / Electrical Engineering / Chemical Engineering Certified WSQ Wafer Fab Engineer
Equipment Engineer	Sustain continuous equipment uptime through hardware maintenance and improvements. Liaise with vendors or equipment makers on the development and improvement of equipment capabilities.	\$3,000 - \$4,500	Degree in Microelectronics Engineering / Mechatronics / Electronics Engineering / Electrical Engineering Certified WSQ Wafer Fab Engineer
Failure Analysis (FA) Engineer	Provide technical direction to an analytical team which verifies, diagnoses and characterizes materials or defect in products.	\$3,000 - \$4,500	Degree in Microelectronics Engineering / Mechatronics / Electronics Engineering / Electrical Engineering Certified WSQ Wafer Fab Engineer

ELECTRONICS – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Failure Analysis (FA) Technician	Participate in an analytical team which verifies, diagnoses and characterizes materials or defect in products.	\$1,600 - \$2,200	Nitec / Higher Nitec in Electronics / Mechatronics / Electrical Engineering / Mechanical Engineering

ELECTRONICS – JOB FEATURE

Integrated Circuit (IC) Design Engineer

Job Description	Wage Range	Qualifications & Training Pathways
Design the circuits embedded within electronic chips. IC designers seek to design ICs with more functionalities and better performance, taking into consideration cost, size and power consumption.	\$3,000 - \$5,500	Degree in Microelectronics Engineering / Mechatronics / Electronics Engineering / Electrical Engineering PCP for Integrated Circuit Design Engineers

Integrated circuit (IC) design engineers design the next generation of ICs that will be used in all kinds of electronic products such as MP3 players and game consoles. IC design engineers are constantly challenged to design ICs with more functionalities and better performance, while taking into consideration cost, size and power consumption.

IC design engineers typically work as part of a design team. As each IC is highly complicated, several IC design engineers are required to work on its different parts. The team may in turn work with other teams around the world to create a larger, more complex system-on-chip solution. In addition, IC design engineers with strong technical expertise and leadership qualities can also progress to product management positions.

Despite the economic downturn, electronics firms continue to hire talents for IC design roles. Indeed, innovative and efficient IC design will continue to be a key differentiating capability for electronics firms, as consumers increasingly crave better performance and more functionalities.

Jobseekers with a degree in Microelectronics Engineering, Mechatronics or Electrical Engineering can therefore consider the IC design engineer job, given its strong outlook and interesting work nature. Mid-career professionals with a degree in areas of Science and Engineering can also transit into the job by undergoing WDA's Professional Conversion Programme (PCP) for Integrated Circuit Design Engineers.

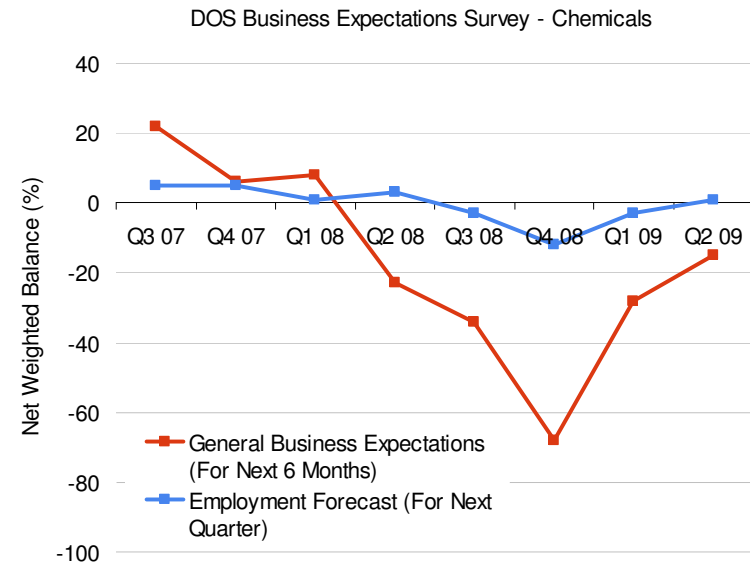
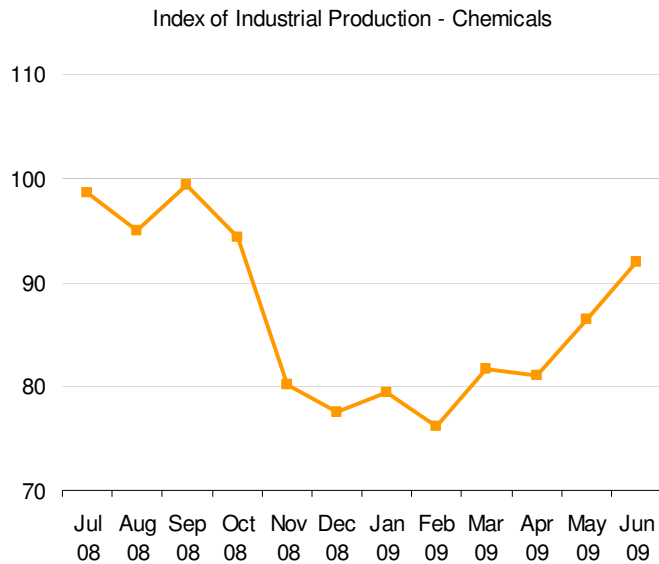
CHEMICALS

The chemicals industry is the largest contributor to Singapore's manufacturing output, accounting for 38.6% (projected) of the overall manufacturing output in 2008. Preliminary figures indicate that output of the chemicals industry reached a record high of S\$97.0 billion in 2008.

Singapore consistently ranks among the world's top three oil trading locations and is recognised as a global leader in oil refining. Besides a strong emphasis on physical and technological infrastructure, Singapore also offers a total solutions approach, integrating innovation, manufacturing, regional distribution, marketing and other services. As the centerpiece of Singapore's energy and chemicals industry, Jurong Island is recognised globally for its highly integrated, world-scale chemical complexes where companies can access the full range of resources to complete their manufacturing chain. This creates a cost-competitive and synergistic environment for some of the world's leading petroleum, petrochemicals and specialty chemicals giants, including Shell, ExxonMobil, Chevron Texaco, Mitsui Chemicals, Degussa and Akzo Nobel.

Like the rest of the manufacturing sector, the chemicals industry has been adversely impacted by the global economic recession. The petroleum and petrochemical segments also anticipate industry margins to come under pressure from the start-up of new plants overseas.

Nonetheless, chemicals companies continue to press ahead with projects that had been committed to before the downturn. These include ExxonMobil's second world-scale cracker complex in Singapore and Shell's new petrochemical complex. These ongoing projects will continue to create demand for Process Engineers and Process Technicians. The pipeline of projects in the chemicals industry is also expected to create approximately 1,000 jobs over the next 2 years.



CHEMICALS – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Process Engineer (Chemical / Mechanical / Electrical / Instrumentation)	Provide technical support and expertise to resolve problems with processes, monitor and analyse process quality trends, and participate in new process design and equipment development.	\$3,150 - \$5,710	Diploma / Degree in Chemical / Mechanical / Electrical Engineering WSQ Advanced Certificate in Process Technology (Engineering Services)
Process Technician (Chemical / Mechanical / Electrical / Instrumentation)	Participate in a wide spectrum of activities spanning operations, maintenance and repair.	\$2,780 - \$4,370	Nitec / Diploma in Chemical Process Technology (Petrochemical) / Chemical Engineering WSQ Certificate in Process Technology (Chemical Production)

CHEMICALS – JOB FEATURE

Process Engineer

Job Description	Wage Range	Qualifications & Training Pathways
Provide technical support and expertise to resolve problems with processes, monitor and analyse process quality trends, and participate in new process design and equipment development.	\$3,150 - \$5,710	Diploma / Degree in Chemical / Mechanical / Electrical Engineering WSQ Advanced Certificate in Process Technology (Engineering Services)

Process engineers provide technical expertise to solve problems with processes, study new equipment and technology to enhance existing processes, gather information and analyse problematic situations to meet better production requirement and quality. Process engineers are also expected to monitor and analyse process quality trends and spearhead new process design and equipment development.

Process engineers can progress to managerial positions after accumulating several years of experience. In addition, skill sets gained by process engineers are transferable and highly sought after by chemicals companies across the entire industry value chain.

About 200 jobs for process engineers will be created in the next few years. With the chemicals industry seeing an influx of new investments, medium term demand for process engineers will remain strong.

Job seekers with a degree in Chemical Engineering, Mechanical Engineering or Electrical Engineering can therefore consider the process engineer position, given its strong outlook and challenging work nature. Mid career professionals with a degree in areas of Science and Engineering can also transit into the job by undergoing WDA's Professional Conversion Programme (PCP) for Chemicals Professionals.

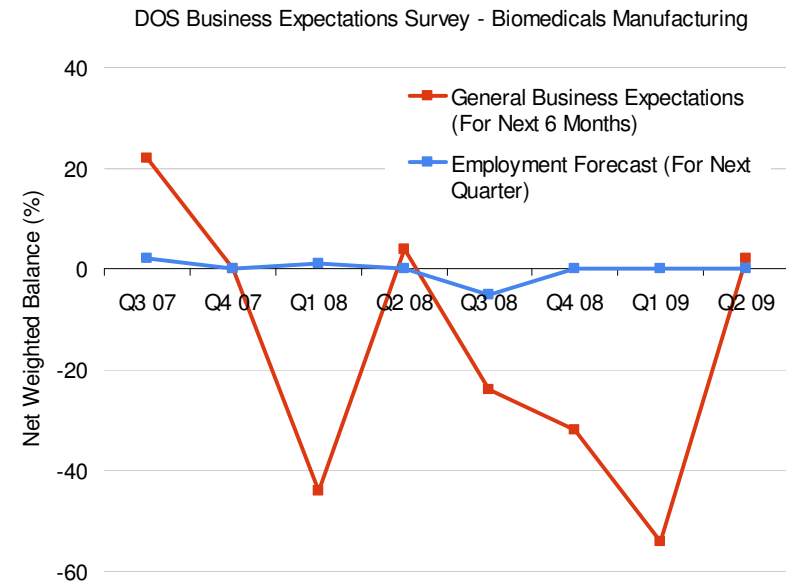
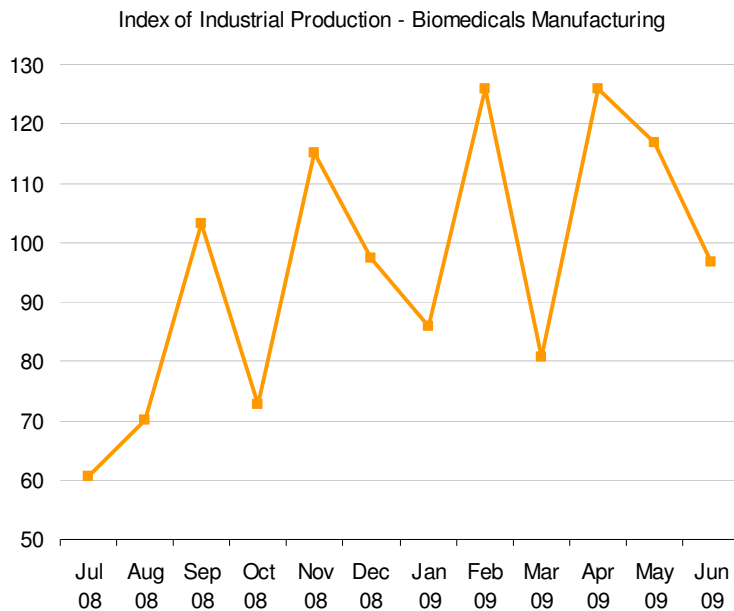
BIOMEDICAL SCIENCES

The biomedical sciences (BMS) industry is a key component of Singapore's manufacturing sector, contributing about S\$19.0 billion in manufacturing output and accounting for over 12,000 jobs in 2008.

BMS companies in Singapore are engaged in a wide range of activities, including R&D, drug discovery and manufacturing. Companies like Novartis and Eli Lilly have set up dedicated research centres here, while others like Schering-Plough and MSD operate sophisticated manufacturing plants. In particular, Singapore has made significant inroads in biologics manufacturing, with Lonza, Novartis, GlaxoSmithKline and Genentech announcing plans to set up five major biologics facilities here, amounting to US\$1.5 billion in capital expenditure within the next two years. In addition, a growing number of companies have established their regional headquarters in Singapore as they seek to expand their outreach into Asian markets.

The BMS industry is holding out in the current economic downturn. In the first five months of 2009, cumulative output of the biomedical manufacturing industry rose by 4.6%, compared to the same period in 2008. The pipeline of new investments will also create about 900 jobs in the BMS industry in 2009. Occupations in demand include Mechanical Engineers, Chemical Technicians, Chemists and Quality Assurance Specialists.

The medium term outlook for the BMS industry remains bright. An ageing population and growing affluence in emerging economics will create demand for new drugs and medication. The new pipeline of biologics manufacturing investments over the next few years, coupled with the introduction of higher value products, will further boost growth of Singapore's BMS industry.



BIOMEDICAL SCIENCES – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Mechanical Engineer	Provide crucial engineering support and advice to the engineering manager and the mechanical maintenance team.	\$3,150 - \$4,890	Diploma / Degree in Mechanical Engineering
Chemist	Experiment and devise cost-effective processes to bring a test product to mass production.	\$2,790 - \$4,420	Diploma / Degree in Chemistry / Applied Chemistry / Chemical Engineering
Quality Assurance Specialist	Utilise laboratory testing facilities to ensure plant products comply with internationally-recognised quality standards.	\$2,000 - \$2,800	Diploma / Degree in Chemical Engineering / Biomedical Engineering / Chemistry PCP for Validation Specialists - Specialised Training Programme in Pharmaceuticals Manufacturing (Validation)
Chemical Technician	Oversee and operate chemical production activities in the plant production line. Ensure that products adhere to high quality standards and customers' stringent requirements.	\$2,220 - \$3,910	Nitec / Diploma in Chemical Process Technology / Chemical Engineering WSQ Certificate in Process Technology (Chemical Production)

BIOMEDICAL SCIENCES – JOB FEATURE

Quality Assurance Specialist

Job Description	Wage Range	Qualifications & Training Pathways
Utilise laboratory testing facilities to ensure plant products comply with internationally-recognised quality standards.	\$2,000 - \$2,800	Diploma / Degree in Chemical Engineering / Biomedical Engineering / Chemistry PCP for Validation Specialists - Specialised Training Programme in Pharmaceuticals Manufacturing (Validation)

Quality assurance specialists utilise professional laboratory testing facilities to ensure that the plant's manufactured products comply with internationally-recognised quality standards. In addition, they put in place procedures in the plant to ensure compliance with guidelines such as clinical Good Manufacturing Practices.

Quality assurance specialists also have clear career progression pathways. Good performers can be promoted to more senior research and analytical positions, and eventually become quality assurance managers earning up to \$9,000 a month. Biomedical sciences companies also regularly send their staff for upgrading and training at their overseas facilities.

The job outlook for quality assurance specialists is bright. As the pharmaceutical industry is highly regulated, skills sets such as validation testing and six-sigma are in great demand. The strong pipeline of investments in the industry also means that more quality assurance specialist jobs will be created over the next few years.

Jobseekers with a diploma in Chemical Engineering, Biomedical Engineering and Chemistry can consider the quality assurance specialist job. Biomedical sciences companies are also open to hiring experienced manpower from the semiconductors and electronics industries with specific skills sets like failure mode analysis, as well as from related industries such as petrochemicals, chemicals and food manufacturing (breweries). Mid career professionals with relevant working experience can therefore transit into the job by undergoing WDA's Professional Conversion Programme (PCP) for Validation Specialists.

AEROSPACE

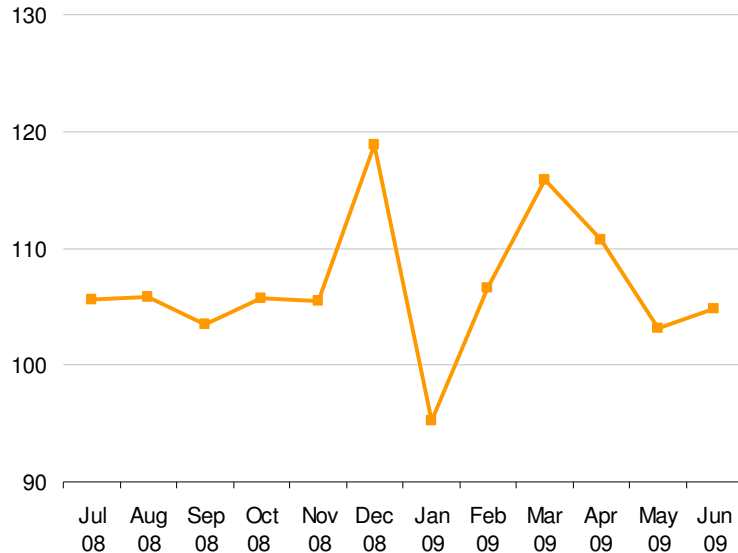
The aerospace industry shows good, sustainable prospects with a compounded annual growth rate (CAGR) of 13.3% since 1990. Preliminary figures indicate that aerospace output reached a record high of more than S\$7 billion in 2008.

There are more than 100 aerospace companies in Singapore, engaging in a wide range of activities across the whole value chain. In manufacturing, a growing number of world-class operations have established a presence here. Rolls-Royce for example is building a state-of-the-art facility to assemble and test the latest engines for the Boeing 787 and the Airbus 350XWB. In Maintenance, Repair and Overhaul (MRO), Singapore offers the most comprehensive suite of capabilities in the region, with nose-to-tail capabilities spanning airframe maintenance and modification, engine overhaul, as well as component and systems repair. We are also a regional leader for aerospace research and development.

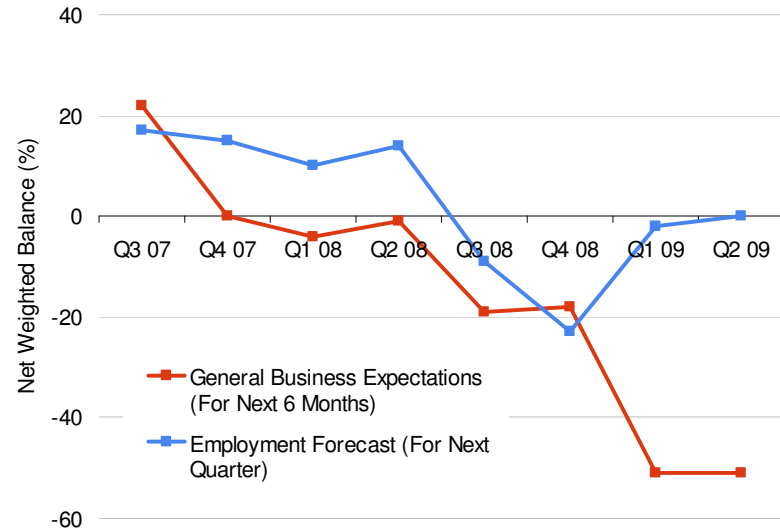
The aerospace industry continues to face declining demand and muted business prospects. The International Air Transport Association (IATA) has forecasted the global airline industry to lose more than US\$9 billion in 2009 and projected passenger and cargo demand to fall sharply. Against this pessimistic backdrop, MRO activities, which form the cornerstone of Singapore's aerospace industry, will remain subdued.

However, the long term prospects remain bright for the aerospace industry, with the global MRO market expected to grow strongly over the next 10 years. In a sign of its continued confidence in Singapore, Rolls-Royce announced plans to build a new factory at Seletar Aerospace Park to manufacture specialized fan blades for aircraft engines. The new plant will create 500 new jobs, and increase Rolls Royce's total investment at Seletar to more than S\$700m.

Index of Industrial Production - Aerospace



DOS Business Expectations Survey - Aerospace



AEROSPACE – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Licensed Aircraft Engineer (LAE)	Repair, inspect and certify aircraft according to air-worthiness standards. Lead a pool of skilled technicians in maintaining aircraft.	\$3,820 - \$7,020	Degree in Aerospace / Aeronautical Engineering PCP for Category B Licensed Aircraft Engineers (Foundation Degree in Aircraft Engineering)
Aircraft Technician	Conduct quality tests and repair aircraft to ensure the aircraft is in safe condition to fly.	\$2,270 - \$3,900	Nitec in Aerospace Avionics / Aerospace Technology / Aerospace Machining Technology WSQ Higher Certificate in Aerospace Maintenance

AEROSPACE – JOB FEATURE

Licensed Aircraft Engineer (LAE)

Job Description	Wage Range	Qualifications & Training Pathways
Repair, inspect and certify aircraft according to airworthiness standards. Lead a pool of skilled technicians in maintaining aircraft.	\$3,820 - \$7,020	Degree in Aerospace / Aeronautical Engineering PCP for Category B Licensed Aircraft Engineers (Foundation Degree in Aircraft Engineering)

Licensed Aircraft Engineers (LAE) oversee aircraft maintenance and certification. Their responsibilities include repairing, inspecting and certifying aircraft according to airworthiness standards, as well as managing a team of skilled technicians.

The aerospace industry has good long term growth prospects. Despite aviation cycle troughs, the industry achieved strong long term growth of between 4% and 5% annually. Coupled with a global shortage of LAEs, demand for LAEs in Singapore will remain strong.

Jobseekers with a diploma or degree in Aeronautical, Electrical, and Mechanical Engineering can therefore consider a career as a LAE, given its good career advancement prospects and strong market demand.

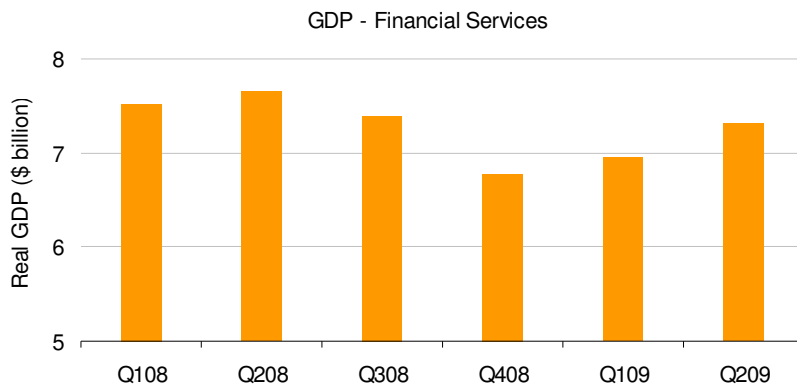
FINANCIAL SERVICES

Singapore is a renowned international financial centre with more than 600 financial institutions engaged in a wide range of financial services. With total assets of S\$1 trillion under management, Singapore is a premier asset management centre in Asia-Pacific. We are also one of the top 5 most active foreign exchange trading centres in the world and a leading commodities trading hub.

In addition, Singapore hosts the operational headquarters for a growing number of international financial institutions which have based their regional middle and back office infrastructure here. This includes the mission-critical functions of risk management, product control, operations and IT. Overall, the finance sector accounted for 13.1% of GDP and 5.4% of employment in Singapore in 2008.

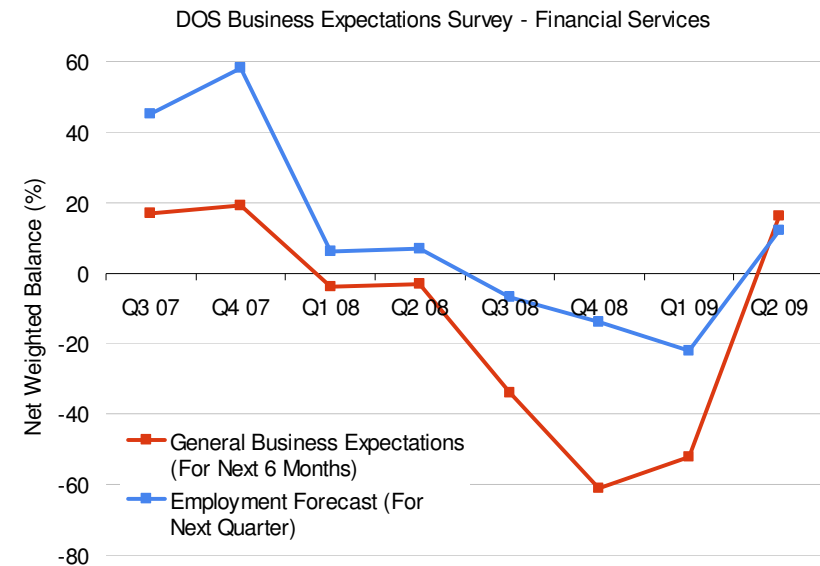
Singapore's financial sector has not been spared from the sub-prime crisis and global recession. While our financial sector has limited exposure to the mortgage-backed securities and credit default swaps at the heart of the sub-prime crisis, financial institutions here have nonetheless been adversely affected by the ensuing tight credit environment and moderating loan growth. Earnings have also been dragged down by declining sales of investment and wealth management products, as well as rising non-performing loans.

As financial institutions conducted cost-cutting exercises and refocused on core businesses, job cuts were seen in Singapore's financial sector in 1H 09. However, the job cuts in Singapore have been more modest compared to global job losses.



Going into the second half of 2009 and 2010, hiring sentiments in the financial sector are expected to pick up along with a gradual recovery in the broad economy. Selected, small scale hiring has already resumed, particularly for more senior positions and in governance-centric roles like risk management, compliance and audit. Various banks have also indicated that they will be hiring fresh graduates under MAS's Finance Graduate Immersion Programme.

In the longer term, the outlook for Singapore's financial sector remains bright. Demographic trends and rising wealth creation in Asia will drive demand for private banking, asset management, treasury and insurance services. Rapid urbanisation across Asia will also lead to strong demand for infrastructure financing. With an increasing emphasis on corporate governance following the sub-prime crisis, Singapore's financial sector is well-positioned to tap these growth opportunities due to our reputation for trust and competence.



FINANCIAL SERVICES - EXECUTIVE JOBS

Job Title	Job Description	Wage Range*	Experience	Relevant Qualifications & Training Pathways^
Risk Manager & Controller	Identify and analyse risks undertaken by the financial institution such as credit risks, market risks and operational risks. Use financial instruments to manage exposure to these risks.	\$36,000 - \$60,000	0-2 years	Degree in Financial Engineering / Banking & Finance / Accountancy / Mathematics / Engineering / Computer Science / Economics / Business FICS Risk Management
		\$50,000-\$110,000	3-5 years	
Compliance Officer	Interpret and ensure adherence to regulatory requirements. Advise on and implement compliance policies of the financial institution.	\$48,000 - \$72,000	3-5 years	Degree in Banking & Finance / Accountancy / Law / Economics / Business FICS Compliance
Operations Officer	Processing and settlement of trades. Liaise with brokers, counterparties and fund managers.	\$30,000 - \$50,000	0-2 years	Degree in Banking & Finance / Accountancy / Economics / Business FICS Financial Markets - Operations Deal Processing and Settlements
		\$45,000 - \$90,000	3-5 years	
Research Analyst	Conduct research on companies, industries and geographical regions. Produce research reports to aid the investment decisions of fund managers and traders.	\$50,000 - \$96,000	1-4 years	Degree in Banking & Finance / Accountancy / Economics / Business FICS Financial Markets - Research
Relationship Manager	Develop and manage relationships with clients of the financial institution (including corporate, mass affluent and high net-worth clients), in order to provide them with suitable financial products and services.	\$42,000 - \$85,000 (Corporate banking)	1-4 years	Degree in Banking & Finance / Accountancy / Economics / Business FICS Corporate Banking - Relationship Management FICS Wealth Management - Relationship Management
		\$45,000 - \$144,000 (Priority banking)	1-4 years	
		\$84,000 - \$110,000 (Private banking)	1-4 years	
Trust Professional	Develop and implement trust structures for high net-worth clients. Administer the trust by providing recording, secretarial and management services.	\$42,000 - \$86,000	1 - 4 years	Degree in Law / Accountancy / Banking & Finance / Economics / Business FICS Wealth Management - Trust Administration, Trust & Estate Planning
Financial IT Engineer	Design, code and test programmes for more efficient bank processes, ranging from pricing and booking trades to calculation of risks.	\$42,000 - \$60,000	2 - 5 years	Degree in Computer Science / Electronics Engineering

Job Title	Job Description	Wage Range*	Experience	Relevant Qualifications & Training Pathways^
Claims & Underwriting Professional	Claims - Process, analyse, investigate and settle claims. Manage negotiations and complaints involving beneficiaries and kins. Underwriting - Assess the risks of individuals or organisation applying for insurance. Determine the policy terms and conditions of insurance covers.	\$30,000 - \$60,000 ⁺	1 - 4 years	Degree in Banking & Finance / Economics / Business / Nursing (for Life Insurance) / Engineering (for General Insurance) FICS Life Insurance - Claims Handling, Underwriting FICS General Insurance - Claims Handling, Underwriting
		\$72,000 - \$130,000	5 - 7 years	
Insurance Broker	Act as intermediaries between insurance companies and insurance buyers (individuals, businesses or other insurers). Advise prospective policyholders on the most suitable products for their needs.	\$30,000 - \$50,000 ⁺	1 - 4 years	Degree in Banking & Finance / Economics / Business
Accountant	Prepare financial statements and tax returns. Advise on associated record-keeping and compliance requirements.	\$34,000 - \$46,000	0-2 years	Degree in Accountancy / Accounting & Finance
		\$43,000 - \$60,000	3-5 years	Association of Chartered Certified Accountants (ACCA) Qualification
Accounts Assistant	Record and compile summaries of the organisation's financial transactions .	\$25,000 - \$30,000	0-2 years	Diploma in Accountancy Certified Accounting Technician (CAT) Qualification
		\$35,000 - \$45,000	3-5 years	

Notes

* Source: Robert Walters Salary Survey Singapore 09, Robert Half Asia-Pacific Salary Guide 09/10, Kelly Services Singapore Employment Outlook and Salary Guide 09/10

⁺ Source: General Insurance Association of Singapore

[^] The Financial Industry Competency Standards (FICS) comprises a set of competency standards required for finance practitioners in various job roles. The full list of training programmes under each job family can be accessed at <http://www.fics.org.sg/directory>.

FINANCIAL SERVICES – JOB FEATURE

Risk Manager

Job Description	Wage Range	Experience	Qualifications & Training Pathways
Identify and analyse risks undertaken by the financial institution such as credit risks, market risks and operational risks. Use financial instruments to manage exposure to these risks.	\$36,000 - \$60,000	0-2 years	Degree in Financial Engineering / Banking & Finance / Accountancy / Mathematics / Engineering / Computer Science / Economics / Business
	\$50,000 - \$110,000	3-5 years	FICS Risk Management

Risk managers safeguard the well-being of a financial institution by ensuring that it does not take on excessive levels of risks. This involves identifying sources of risk, measuring and analysing the risks, and using financial instruments to manage exposure to these risks. Risk managers may also specialise in one of various risk types, including credit risk – the risk arising from the failure of individuals or companies to meet repayments, market risk – the risk of adverse movements of market factors such as interest rates, foreign exchange rates and commodity prices, and operational risk – the risk arising from inadequate internal controls and processes.

The sub-prime crisis brought to the fore the importance of risk management, as excessive credit risks undertaken by financial institutions unravelled and adversely affected the real economy. In the ensuing tight credit environment, demand for governance-centric roles such as risk management, compliance and audit has grown. Financial institutions in Singapore continue to hire for risk management professionals, in particular candidates with experience in credit risk management, strong product knowledge (e.g. commodities, derivatives) and quantitative modelling skills. As governments around the world put in place more stringent regulatory frameworks following the sub-prime crisis, demand for risk management professionals will continue to be strong in the long term.

In Singapore, risk managers can expect to earn \$36,000 – \$60,000 annually with 0–2 years’ experience and \$50,000 – \$110,000 with 3–5 years’ experience⁴. The career progression pathway of risk managers can be analyst, associate, vice president and finally, senior management/managing director. Progression may also entail moving between organisations, or moving into specialist risk consultancies.

⁴ Source: Robert Half Asia-Pacific Salary Guide 09/10

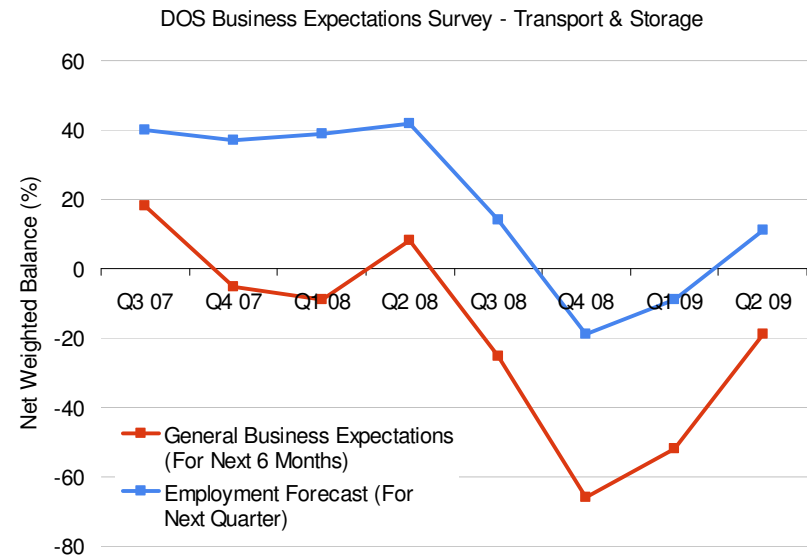
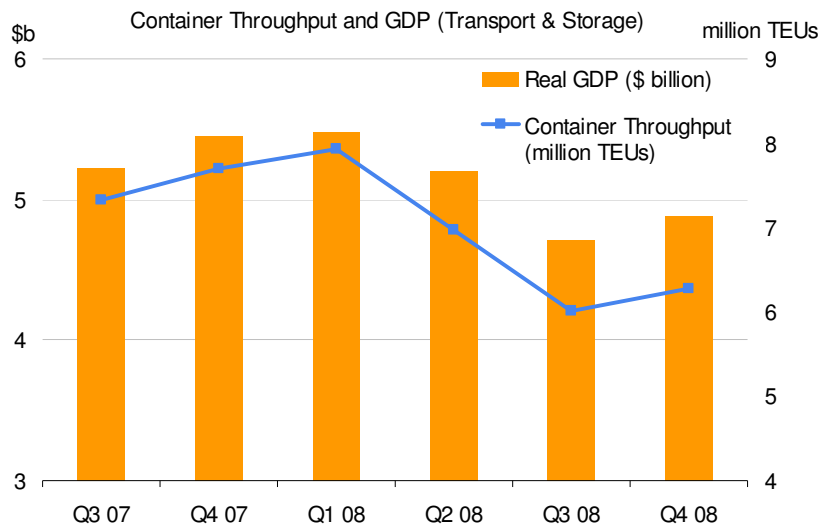
LOGISTICS

Capitalising on our traditional strengths of a world-class physical and IT infrastructure, excellent connectivity, business-friendly tax structure and efficient 24/7 operations, Singapore has become a leading global logistics hub and supply chain management nerve centre. Today, more than 3,000 international and local logistics companies have established operations in Singapore. In particular, 21 of the world's top 25 third-party logistics companies (3PLs) have established a substantial presence in Singapore, with most of them basing their regional headquarters function here.

Many 3PLs have invested significantly in facilities and capabilities to meet industries' needs for specialised handling of products such as chemical and petroleum products, as well as temperature-sensitive clinical and diagnostic materials. These high value-added logistics capabilities, coupled with strong logistics thought leadership, will further strengthen Singapore's position as a leading logistics hub in the world.

As a major transshipment hub, Singapore's port, shipping and logistics sectors have been impacted by the economic recession and sustained weakness in global trade. In recent months, business prospects in the logistics industry have improved, as the decline in container throughput and non-oil domestic exports (NODX) begin to ease. However, the pace of recovery is expected to be gradual. Globally, final demand in Singapore's key export markets in the US and Europe remains weak, as consumers seek to reduce household debt and cut down on discretionary spending amidst an uncertain outlook.

Despite the decline in business activities, there is continued demand for logistics manpower in Singapore to fill existing vacancies, in particular for rank-and-file positions such as Class 4 Drivers, Warehouse Assistants and Crane Operators.



LOGISTICS – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Logistics Executive (Shipping, Warehouse, Freight, Transportation)	Ensure the smooth movement of inbound and outbound cargo. Perform roles such as inventory management, ship chartering, route planning and negotiation of freight rates and haulage costs. Optimise supply chains to reduce costs and turnaround time.	\$2,400 - \$3,620	General Diploma / Degree

LOGISTICS – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Warehouse Assistant	Handle inbound and outbound cargo in the warehouse, including packing, loading/unloading, palletizing, forklifting and simple data entry.	\$1,300 - \$2,020	PSLE / GCE 'N' / 'O' Levels WSQ Certificate / Advanced Certificate in Generic Manufacturing Skills (Logistics)
Trailer-Truck Driver / Prime Mover Driver	Drive trailer trucks or prime movers transporting containers between the ports and warehouses.	\$2,030 - \$2,390	PSLE / GCE 'N' / 'O' Levels Train and Place Class 4 Driving Programme
Van Driver	Drive vans or smaller-sized trucks transporting cargo between warehouses of logistics service providers and customers.	\$1,380 - \$1,980	PSLE / GCE 'N' / 'O' Levels
Fork Lift Operator	Operate forklifts to move palletized cargo at the ports and within the warehouse.	\$1,500 - \$2,330	PSLE / GCE 'N' / 'O' Levels WSQ Certificate / Advanced Certificate in Generic Manufacturing Skills (Logistics)
Crane Operator	Operate yard cranes and quay cranes to load/unload containers onto prime movers and shipping vessels.	\$2,500 - \$3,060	PSLE / GCE 'N' / 'O' Levels

LOGISTICS – JOB FEATURE

Trailer Truck / Prime Mover Driver

Job Description	Wage Range	Qualifications & Training Pathways
Drive trailer trucks or prime movers transporting containers between the ports and warehouses.	\$2,030 - \$2,390	PSLE / GCE 'N' / 'O' Levels Train and Place Class 4 Driving Programme

Logistics drivers drive large trailer trucks and prime movers which transport containers between the ports and warehouses. Due to the time-critical nature of the logistics industry, trailer truck and prime mover drivers play an important role in ensuring that inbound and outbound cargo is delivered on schedule. The 24/7 operations of the logistics industry also mean that working hours are long and can stretch up to 12 hours a day. However, there are several lull periods for trailer truck and prime mover drivers during the day, as demand from customers is typically episodic.

Trailer truck drivers and prime mover drivers are required to possess Class 4 and Class 5 licenses respectively. Qualification requirements are low, with companies employing individuals with PSLE and GCE 'N' and 'O' Levels. Trailer truck and prime mover drivers can also expect to earn attractive gross monthly wages of about \$2,000 - \$2,400. In addition, experienced and capable drivers can progress to become transport supervisors.

Prior to the economic downturn, there had been an industry-wide shortage of trailer truck and prime mover drivers, with many logistics companies having excess vehicle capacity. Despite the decline in demand during the economic recession, logistics companies continue to hire actively for trailer truck and prime mover drivers to fill existing vacancies. Jobseekers with Class 4 and 5 licenses should therefore consider the job. Those without the relevant licenses can also undergo WDA's Train and Place Class 4 Driving Programme.

ADMINISTRATIVE & SUPPORT SERVICES

The administrative and support services sector comprises a wide range of activities, including employment agency activities, office administrative activities and the provision of security, cleaning and landscaping services.

The sector has experienced strong GDP and manpower expansion over the past few years. In particular, the security industry has grown strongly amidst the increasing threat of global terrorism and the heightened need to safeguard key installations and property in Singapore. In an effort to enhance the professionalism of the security industry, stringent training programmes have also been put in place for both unarmed security officers and armed Auxiliary Police Officers (APOs) to ensure that security officers are adequately skilled before deployment.

Besides the security industry, the cleaning industry has also been growing rapidly in recent years, driven by increasing outsourcing of office/industrial cleaning functions and a rise in the number of commercial/industrial buildings and shopping malls in Singapore. Furthermore, the recent H1N1 outbreak has focused much public attention on the importance of effective cleaning to upkeep good hygiene standards.

An increasingly important segment within the administrative & support services sector is the landscaping industry. Landscape companies are involved in landscape construction work for ponds, waterfalls and nature reserves, as well as landscape maintenance work for golf courses, resorts and residential, commercial and industrial buildings. Looking ahead, demand for landscaping services will continue to grow, boosted by greater social appreciation of landscapes in Singapore and new projects such as the construction of Gardens by the Bay and the second Botanic Gardens.

Despite the economic downturn, security, cleaning and landscaping companies continue to hire for positions such as Security Officers, Auxiliary Police Officers, Cleaners and Landscape Technicians. The strong manpower demand is expected to be sustained in the longer term, as the need for these essential services continues to rise.

ADMINISTRATIVE & SUPPORT SERVICES – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Premises Maintenance Manager	Ensure that facilities and common areas of a building are properly maintained. Prepare budgets of the building's expenses. Supervise a team of facilities management executives.	\$3,900 - \$7,260	Diploma / Degree in Building Science / Real Estate / Facilities Management

ADMINISTRATIVE & SUPPORT SERVICES – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Private Security Officer	Maintain the security of buildings, properties and key installations such as seaports and airports. Operate specialised security screening equipment.	\$1,300 onwards	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Security Operations
Security Supervisor	Oversee the security of the property or installation and supervise a team of security officers.	\$1,700 onwards	PSLE / GCE 'N' / 'O' Levels WSQ Advanced Certificate in Security Supervision Security Supervisor Conversion Programme
Office Cleaner	Maintain cleanliness of assigned offices.	\$700 - \$900	PSLE / GCE 'N' / 'O' Levels
Cleaner (Industrial Establishment)	Perform a range of cleaning activities, including cleaning lint, dust, oil and grease from machines and waxing and polishing floors. Industrial cleaners might also be required to transport trash and waste to appropriate disposal areas.	\$700 - \$1,000	PSLE / GCE 'N' / 'O' Levels
Cleaner Supervisor	Supervise a team of cleaners. Responsible for the cleanliness and hygiene of the assigned job sites.	\$1,100 - \$1,600	PSLE / GCE 'N' / 'O' Levels
Landscape Technician	Maintain plants, prune hedges and shrubs and support landscape implementation works.	\$1,000 - \$1,300	PSLE / GCE 'N' / 'O' Levels WSQ Certificate / Higher Certificate in Landscape Operations

ADMINISTRATIVE & SUPPORT SERVICES – JOB FEATURE

Private Security Officer / Auxiliary Police Officer

Job Description	Wage Range	Qualifications & Training Pathways
Maintain the security of buildings, properties and key installations such as seaports and airports. Operate specialised security screening equipment.	\$1,090 - \$1,710	PSLE / GCE 'N' / 'O' Levels WSQ Certificate in Security Operations

Private security officers, comprising unarmed security officers and Auxiliary Police Officers (APOs), maintain the security of buildings, properties and key installations such as seaports and airports. The responsibilities of unarmed security officers include controlling access to assigned properties and operating specialised security screening equipment. On the other hand, APOs escort over-sized vehicles, perform cash-in-transit operations, traffic control and event security control.

Private security officers typically work on 12 hour shifts. The working environment varies across job sites, ranging from industrial and commercial buildings to residential estates and outdoor events such as the Singapore Grand Prix (Formula One).

Reflecting the high level of professionalism in the industry, structured training programmes have been put in place for private security officers. Unarmed security officers are required to go through mandatory entry level training and certification under the Security Workforce Skills Qualifications (WSQ) before deployment. APOs have to undergo a compulsory 6 week residential APO course and attain certification before deployment. APOs are also required to possess at least 3 GCE 'N' Levels. On the other hand, there is no minimum educational requirement for unarmed security officers, with companies employing individuals with PSLE and GCE 'N' or 'O' Levels.

Even during the downturn, companies are actively recruiting unarmed security officers and APOs. In the medium term, demand for essential security services will continue to rise in tandem with growth of the economy and opening of new commercial buildings and shopping malls.

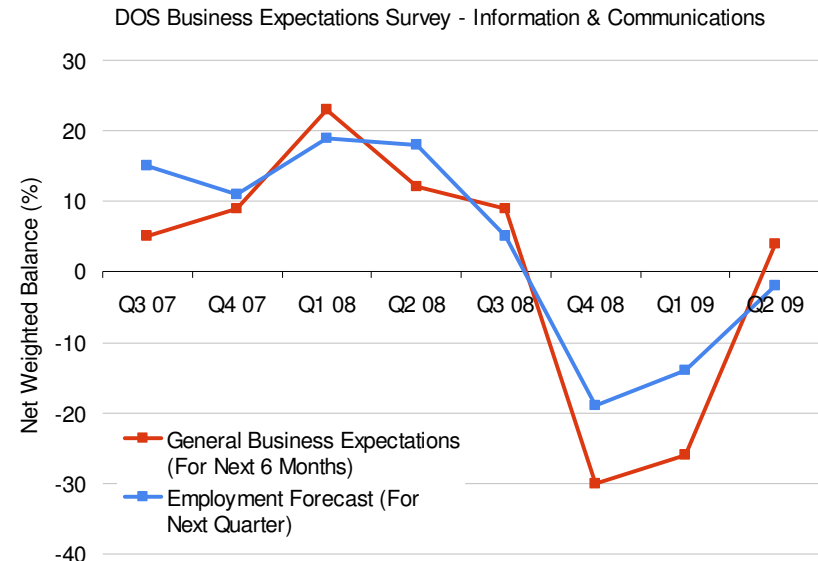
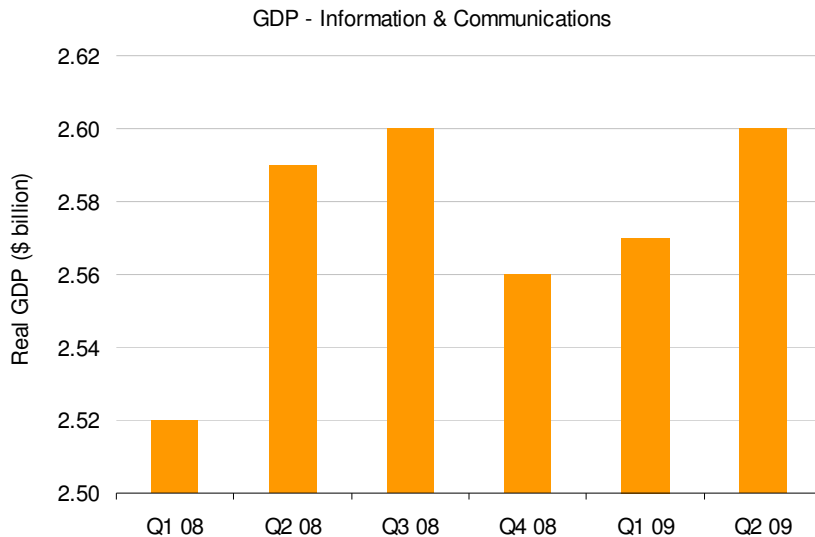
INFOCOMMUNICATIONS TECHNOLOGY (ICT)

Infocommunications technology (ICT) is increasingly seen as a key enabler for growth across all industries. Over the past few years, ICT has greatly enhanced Singapore's competitiveness by raising productivity and transforming business processes. Today, many top technology companies have made Singapore a key node in their global network, a strong testament to our position as a global ICT hub.

The ICT sector also contributes significantly to GDP and employment in Singapore. In 2008, infocomm industry revenue grew by 12.4% to reach S\$58.1 billion. In particular, the *IT Services* segment saw strong revenue growth of 41.3%. Infocomm employment also grew strongly by 6.6% to reach 139,000 in June 08, with *infrastructure support, infocomm sales & marketing* and *software development* employing the most number of infocomm manpower.

The global economic recession has adversely impacted the ICT sector, as organisations review their ICT budgets amidst an increasingly cost conscious environment. In particular, infocomm companies providing services to the finance industry have taken the biggest hit. However, pockets of growth exist for selected infocomm segments. There is continued demand for IT outsourcing services as organisations seek to manage business costs. Organisations are also increasingly looking to leverage on ICT to optimise business processes and reduce costs. ICT companies are therefore looking to recruit for positions such as Software Engineers, Systems Analysts and Enterprise Resource Planning (ERP) Professionals.

In the longer term, the ICT sector is poised to grow strongly. The Government has announced that it will be spending a total of S\$1.73 billion to support the pipeline of new infocomm projects between 2009 and 2010. The Intelligent Nation 2015 (iN2015) plan has also been launched, with the aim of doubling value-add of the industry to S\$26 billion, increasing ICT export revenue to S\$60 billion and creating 80,000 ICT and related jobs by 2015.



INFOCOMMUNICATIONS TECHNOLOGY (ICT) – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Enterprise Resource Planning (ERP) Professional	Customise and implement ERP systems for client organisations. Analyse the organisation's existing business processes and configure ERP software to suit unique business needs.	\$3,000 - \$9,000	Diploma / Degree in Computer Science / Computer Engineering / Information Technology PCP for Enterprise Resource Planning Professionals
Software Engineer	Translate business cases into technical specifications. Design, test, implement and maintain software to meet client needs. Work with programmers to ensure systems developed conform to specifications.	\$3,300 - \$5,280	Diploma / Degree in Computer Science / Computer Engineering / Information Technology
Systems Analyst	Examine existing business models in client organisations, and design systems to improve business processes and streamline data flows. Define software, hardware and network requirements for new systems.	\$3,430 - \$5,500	Diploma / Degree in Computer Science / Computer Engineering / Information Technology PCP for Systems Analysis Professionals
Systems Programmer	Write programmes to maintain and control operating systems, networked systems and database systems.	\$2,800 - \$4,620	Diploma / Degree in Computer Science / Computer Engineering / Information Technology
System Administrator	Maintain network hardware and software, monitor networks to ensure their availability to system users and troubleshoot problems reported by users.	\$2,880 - \$5,160	Diploma / Degree in Computer Science / Computer Engineering / Information Technology PCP for System Administrators
Technical Support Engineer / Associate	Provide first level support to users encountering problems with IT applications, systems or devices. Carry out routine maintenance tasks on computers to detect faults.	\$1,670 - \$2,230	Diploma / Degree in Computer Science / Computer Engineering / Information Technology

INFOCOMMUNICATIONS TECHNOLOGY (ICT) – JOB FEATURE

Software Engineer

Job Description	Wage Range	Qualifications & Training Pathways
Translate business cases into technical specifications. Design, test, implement and maintain software to meet client needs. Work with programmers to ensure systems developed conform to specifications.	\$3,300 - \$5,280	Diploma / Degree in Computer Science / Computer Engineering / Information Technology NICF Software Design & Development

Software engineers work with programmers to ensure that applications and systems developed conform to specifications. This involves translating business cases into technical specifications, developing system infrastructure design plans and development methodologies, identifying the allocation of hardware and software, and testing subsystems developed by programmers.

The work of software engineers is typically office-based, though they sometimes travel to meet clients. Software engineers may also be required to be on-call to attend to problems, which can entail evening or weekend work. In addition, software engineers work closely with other IT professionals such as applications and systems programmers, systems analysts, project managers and IT sales and marketing professionals.

According to IDA's Infocomm Manpower Survey 2008, *software development* reported the most number of job vacancies and employed the third-highest number of infocomm manpower in 2008. Even during the downturn, companies continue to hire software engineers.

In the medium term, demand for infocomm manpower in the areas of software design and software & solution implementation is expected to grow strongly. Jobseekers with a diploma or degree in Compute Science, Computer Engineering or Information Technology can therefore consider taking up the software engineer job given its bright prospects.

HEALTHCARE AND SOCIAL & COMMUNITY SERVICES

Singapore's integrated healthcare system comprises primary healthcare (outpatient polyclinics and private medical practitioner's clinics), hospital care and Intermediate and Long-Term Care (ILTC).

As Singapore faces an ageing population, the healthcare industry is at an important crossroad. The number of Singaporeans aged 65 years and above is projected to increase to 900,000 by 2030. This will compound healthcare needs as the elderly are more likely to be hospitalized and consumer more healthcare resources. Demand for ILTC services, provided by community hospitals, nursing homes, home nursing and day rehabilitation centres, will also intensify, as most of the elderly will have health conditions that require long-term chronic care rather than short-term acute hospital care.

Hospital Admission Rate (per 1000 population)			
	2005	2006	2007
Public Sector Hospitals			
Male	80.5	81.5	77.7
0 - 14 years	59.5	59.3	57.1
15 - 64 years	63.0	62.7	59.4
65 years & above	317.6	324.2	305.5
Female	77.2	77.3	73.8
0 - 14 years	49.7	50.5	48.9
15 - 64 years	60.1	58.2	54.9
65 years & above	274.3	280.9	266.7
Private Sector Hospitals			
Male	14.0	13.2	12.8
0 - 14 years	35.0	33.1	30.9
15 - 64 years	6.2	5.8	5.9
65 years & above	30.8	31.2	31.1
Female	25.3	24.7	23.4
0 - 14 years	32.5	30.8	28.1
15 - 64 years	22.2	21.9	20.9
65 years & above	34.6	34.4	33.5

Note: Refers to Singapore Residents. 2007 figures are preliminary.

Alongside the healthcare sector, the social and community services sector provides a wide range of social services to Singaporeans. Workers in social services help the needy obtain financial assistance, provide counseling to troubled individuals, retrain the unemployed and care for children, the elderly and the disabled.

In the medium term, the healthcare industry is expected to grow strongly. Two new public hospitals are slated to open in the next few years – the Khoo Teck Puat Hospital in 2010 and Jurong General Hospital in 2014. In an effort to strengthen the ILTC sector, the Government is also working with private and Voluntary Welfare Organisations (VWOs) to expand nursing home capacity from 9,200 to 14,000 beds and increase community hospital capacity by an estimated 60% over the next decade.

At the same time, rising affluence and demographic trends in the Asia-Pacific will continue to boost medical tourism in Singapore. To maintain our competitiveness in the global arena, Singapore's healthcare institutions are also actively engaged in clinical research development, participating in the global search for faster diagnoses and better and more cost-sustainable care for patients.

As Singapore's healthcare industry continues to grow, there is strong demand for skilled healthcare professionals. Over the next 2 years, the public healthcare sector expects to create 4,500 healthcare jobs, with approximately half for Nurses, a quarter for Doctors and Allied Healthcare Professionals such as Diagnostic Radiographers, Physiotherapists and Occupational Therapists, and the remaining quarter for administrative positions. In the social and community services sector, Pre-School Teachers and Social Service Assistants are also in demand.

Health Facilities (number of)			
	2005	2006	2007
Hospitals / Specialty Centres	29	30	30
Hospital Beds	11,848	11,527	11,547
Public Sector Hospital Beds	8,617	8,320	8,368
Private Sector Hospital Beds	3,231	3,207	3,179
Polyclinics	18	18	18
Public Sector Dental Clinics	239	241	242

HEALTHCARE AND SOCIAL & COMMUNITY SERVICES – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Registered Nurse	Plan, provide and evaluate preventive, curative and rehabilitative care for patients. Supervise enrolled nurses and healthcare assistants.	\$2,170 - \$3,490	Diploma in Nursing PCP for Registered Nurses
Enrolled / Assistant Nurse	Assist Registered Nurses to plan and provide for the holistic care of patients.	\$1,470 - \$2,270	Nitec in Nursing Place & Train Programme for Enrolled Nurses
Pharmacist	Advise the public on self-medication and treatment of minor ailments and dispense medicines based on a doctor's prescription. Provide advice on medical devices such as blood pressure monitoring equipment.	\$3,340 - \$4,640	Degree in Pharmacy
Clinical Research Coordinator	Assist the investigators in conducting clinical trials and research according to Clinical Practice guidelines. Basic duties include site organization, patient recruitment and assisting in patients' visits. Additional tasks include maintaining drug accountability, collecting data, reporting adverse events and completing clinical reports.	\$2,830 - \$3,590	Degree in Health Sciences Diploma in Nursing with 2 years of working experience
Care / Wellness Coordinator	Provide discharge planning, care coordination, monitoring/evaluation and education for patients and their families.	\$2,020 - \$2,980	Diploma in Nursing / Allied Health
Diagnostic Radiographer	Use sophisticated medical equipment to produce radiographic images of the body, which assist the healthcare team in diagnosing illnesses and injuries. Process data and perform 3D reconstructions in radiological investigations.	\$2,650 - \$4,000	Diploma in Diagnostic Radiography PCP for Diagnostic Radiographers

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Occupational Therapist	Help people with physical disabilities, mental or social problems develop their capacity to perform day-to-day tasks. Design therapy programmes to promote independent living and re-integration into home, work and society.	\$2,290 - \$3,860	Diploma in Occupational Therapy PCP for Occupational Therapists
Physiotherapist	Help patients ranging from sportspeople to the elderly relieve pain, regain mobility and improve muscle strength.	\$2,470 - \$4,030	Diploma in Physiotherapy PCP for Physiotherapists
Social Worker	Help people overcome challenges such as poverty and domestic violence by mobilising social resources, developing nurturing relationships and creating supportive social conditions. Social workers engage the family, schools, employers and/or social policies when dealing with individuals' problems.	\$2,120 - \$2,900	Degree in Social Work PCP for Social Workers
Special Education Teacher	Teach young children with physical/intellectual disabilities or special learning needs using specialised teaching programmes. Help develop their capabilities and potential to integrate into mainstream society.	\$1,360 - \$2,600	Diploma in Special Education
Pre-School Teacher	In charge of teaching and caring for pre-school children from the ages 3 - 8 years old in either a childcare or kindergarten setting. Equip the children with social skills and nurture in them a love for learning.	\$1,250 - \$1,680	Diploma in Early Childhood Care and Education - Teaching WSQ Professional Diploma in Early Childhood Care and Education

HEALTHCARE AND SOCIAL & COMMUNITY SERVICES – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Healthcare Assistant / Hospital Attendant	Assist nurses in providing basic care to patients, including monitoring temperatures and pulse rates, assisting patients in bed/bath and serving food to patients.	\$1,140 - \$1,490	GCE 'N' / 'O' Levels Place & Train Programme for Healthcare Assistants (Step-Down Care) WSQ Higher Certificate in Community and Social Services (Senior Services)
Therapy Assistant / Aide	Assist therapists in administrative, clinical and technical duties. Involved in setting up/supervising/assisting patients in the performance of therapeutic exercises, preparing patient records, arrange portering for patients, performing basic data entry and maintaining therapeutic equipment and devices.	\$850 - \$1,200	GCE 'N' / 'O' Levels / Diploma
Pharmacy Technician	Prepare and dispense medication according to established procedures. Provide appropriate medication counseling and information to patients. Manage the drug inventory.	\$1,700 - \$2,500	GCE 'O' Levels Diploma / Advanced Diploma in Pharmaceutical Science / Pharmacy Practice WSQ Advanced Certificate in Healthcare Support (Pharmacy Support)
Social Service Assistant	Organise and facilitate meaningful activities for clients and provide basic care based on clients' needs. Assist social workers, counsellors, psychologists and therapists in providing rehabilitation and care.	\$1,000 - \$1,200	GCE 'N' / 'O' Levels / Nitec in Social Services

HEALTHCARE AND SOCIAL & COMMUNITY SERVICES – JOB FEATURE

Registered Nurse

Job Description	Wage Range	Qualifications & Training Pathways
Plan, provide and evaluate preventive, curative and rehabilitative care for patients. Supervise enrolled nurses and healthcare assistants.	\$2,170 - \$3,490	Diploma in Nursing PCP for Registered Nurses

Registered Nurses plan and provide for the holistic care of patients, including preventive, curative and rehabilitative care. They are also required to supervise Enrolled Nurses and healthcare assistants.

Registered Nurses are required across the broad spectrum of healthcare institutions, ranging from primary care settings (polyclinics and GP clinics) and public and private hospitals, to step-down care facilities such as nursing homes and community hospitals as well as clinical research and educational institutions. Most Registered Nurses working in in-patient facilities operate on shifts, with typical hours of 7am – 2.30pm, 2pm – 9.30pm and 9.00pm – 7.30am.

Registered Nurses can develop his/her nursing skills in a wide range of specialties, including critical care, gerontology, mental health, midwifery, neuroscience, oncology and orthopaedics. There are also clear career progression pathways for Registered Nurses along the clinical, education and management tracks. Nurse Clinicians specialise in a clinical specialty and perform specialised procedures in their area of practice; Nurse Educators plan and implement education and training programmes for nurses in hospitals or educational institutions; Nurse Managers manage a ward or department in a healthcare institution.

With rising demand for healthcare services and the opening of new hospitals, nursing homes and community hospitals, there is strong hiring for Registered Nurses. Jobseekers with a diploma or degree in Nursing which is recognised by the Singapore Nursing Board can consider taking up this job. Those without recognised qualifications can also undergo WDA's Professional Conversion Programme (PCP) for Registered Nurses to obtain the necessary qualifications.

CREATIVE INDUSTRIES – ARTS, DESIGN & MEDIA

As Singapore transits into a knowledge-based economy, ideas and imagination have become valuable assets and drivers of economic growth. Many countries around the world, including Singapore, now see the Creative Industries as a key competitive advantage. Besides generating direct demand for creative products, the Creative Industries also has spillover benefits for the rest of the economy, adding style, aesthetics and freshness to our products and services.

Singapore's Creative Industries comprise the Arts, Design, Media and Software & IT Services sectors. Today, the local arts scene is diverse and vibrant, with an increasing number of arts and cultural events being held each year and growing participation by Singaporeans. In the design sector, design is increasingly infused in products and processes across various industries, enhancing their competitiveness. The architectural services segment has also been gaining international recognition for its iconic projects. In media, the industry has made significant inroads into the international market, with growing demand for Made-in-Singapore content. A thriving Interactive Digital Media (IDM) ecosystem has also been forged with the establishment of leading games and animation studios in Singapore such as Lucasfilm, Ubisoft and KOEI.

The Creative Industries has not been spared from the economic downturn. The industrial design sector for example has experienced a slowdown in the bringing to market of new designs, while demand in the advertising sector has declined as clients limit spending to tactical spending to drive sales. In the arts sector, there has been a decline in the commissioning of new local productions and in the number of international arts companies visiting Singapore.

However, the Creative Industries is highly pipeline-dependent and new job opportunities will continue to arise as projects are secured. For example, at the Creative Industries Fair in Feb 09, some 300 jobs were available. In particular, international games & animation studios in Singapore continue to hire Digital Animation Artists, Game Designers and Game Programmers to work on ongoing productions. There is also demand for New Media Sales Professionals and Arts Managers due to existing vacancies.

Creative Industries	
Nominal Value-Added (2008 est.)	S\$9.2 billion
% Contribution to Overall GDP (2008 est.)	3.6%
Number employed in Creative establishments (2008 est.)	114,600

Media	
Nominal Value-Added (2008 est.)	S\$5.3 billion
Number employed in Design establishments (2008 est.)	57,200

Design	
Nominal Value-Added (2008 est.)	S\$3.4 billion
Number employed in Design establishments (2008 est.)	41,600

Arts	
Number of arts companies and societies (2007)	794
Number of arts activities (2007)	26,626
Number of arts performances (2007)	7,449
Total ticketed attendance at arts events (2007)	1.49 million

CREATIVE INDUSTRIES (ARTS, DESIGN & MEDIA) – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Game Programmer	Design and write the computer code that runs and controls the game. Programme for different platforms, including consoles, online and mobile devices.	\$2,500 - \$3,000 (Starting salary)	Diploma / Degree in Infocomm Technology / Multimedia / Interactive Media / Game Programming PCP for Games Development (Game Programmers)
		\$3,000 - \$6,000 (4 - 5 years)	
Game Designer	Conceptualise the game from beginning to end, including background story, rules, core game play, community features, plot, props and avatars.	\$2,500 - \$3,000 (Starting salary)	Diploma / Degree in Game Design / Infocomm Technology / Multimedia / Interactive Media PCP for Games Designers
		\$3,000 - \$6,000 (4 - 5 years)	
Technical Artist	Work as a liaison between software engineers and the artistic team working on a game. Contribute to art creation in the design of the game, utilise programming software and solve technical issues involving characters and animation.	\$2,500 - \$3,000 (Starting salary)	Diploma / Degree in Infocomm Technology / Multimedia / Interactive Media / Game Programming PCP for Games Development (Technical Artists)
		\$3,000 - \$6,000 (4 - 5 years)	
Digital Animation Artist	3D modelers translate character and prop designs into physical and computer-generated models; riggers create physical skeletons or structures; texture artists create textures for the modelled characters, objects and environment; animators produce images to create the illusion of movement.	\$1,800 - \$2,200 (Starting salary)	Diploma / Degree in Digital Animation / Multimedia / Interactive Media / Computer Graphics / Visual Arts / Fine Arts PCP for Digital Animation Artists
		\$4,000 (3 - 5 years)	
New Media Sales Professional	Promote, market and sell media advertising space across different media channels and platforms. Develop and implement tactical sales plans to achieve revenue goals. Prospect for new accounts and establish good account management relationships with existing clients.	\$1,800 - \$2,500 (Starting Salary)	General Diploma / Degree PCP for New Media Sales Professionals
Arts Manager	Plan, organise and promote events for arts and cultural organisations such as theatres, museums, art galleries, art festivals and community centres.	\$2,400 - \$5,000	Diploma / Degree in Arts Management / Visual Arts and Design / Art History / Performing Arts / Literary Studies PCP for Arts Managers

CREATIVE INDUSTRIES (ARTS, DESIGN & MEDIA) – JOB FEATURE

Digital Animation Artist

Job Description	Wage Range	Qualifications & Training Pathways
3D modelers translate character and prop designs into physical and computer-generated models; riggers create physical skeletons or structures; texture artists create textures for the modelled characters, objects and environment; animators produce images to create the illusion of movement.	\$1,800 - \$2,200 (Starting salary)	Diploma / Degree in Digital Animation / Multimedia / Interactive Media / Computer Graphics / Visual Arts / Fine Arts PCP for Digital Animation Artists
	\$4,000 (3 - 5 years)	

Digital Animation Artists are involved in the entire production process from hand sketching characters and environments to animating the film. During the pre-production phase, Concept Artists produce 2D drawings of characters and environments. Using these concept drawings, 3D Modelers sculpt physical models using clay/plaster and create digital models using animation software.

Riggers build rigs which define the internal skeletal structure of characters and determine the characters' range of motions, while Texture Artists create highly detailed textures for characters such as skin and fur. After the layout, models, rigs, textures, voice tracks and timings have been finalised, Animators use animation software to create realistic and seamless moving images.

While the Games & Animation industry is associated with a glamorous and exciting image, the amount of work that goes into creating a production is substantial. Creating a digital character for example can be highly time-consuming and reiterative, taking up to a few months to create to perfection. The qualities of passion, perseverance and professionalism (3 "Ps") are therefore highly valued by industry. In fact, games and animation studios have indicated that they are willing to hire talents in the absence of qualifications, as long as they possess strong artistic and drawing skills, demonstrate the 3 "Ps" and can showcase a strong portfolio.

Even during the downturn, international games & animation studios based in Singapore continue to hire Digital Animation Artists to work on ongoing productions. Looking ahead, demand for Digital Animation Artists is expected to grow strongly, as leading international studios expand their operations in Singapore and local studios increasingly capture global mindshare with Made-in-Singapore content.

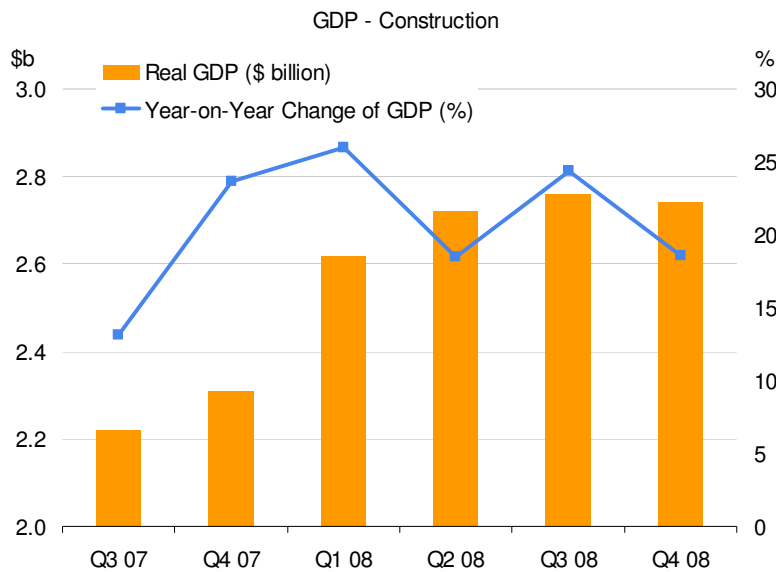
CONSTRUCTION

The construction industry is a diverse sector supporting the design, development, construction and maintenance of the built environment and infrastructure. Many professionals are engaged in a variety of roles ranging from design and conceptualisation to cost estimation, construction supervision, project management and facilities management.

In the last few years, environmental consciousness and sustainability in the built environment has become increasingly prominent in Singapore's construction industry. Developers, designers and builders are encouraged to go green and construct energy efficient buildings by adopting materials and products that reduce the depletion of natural resources. At the same time, barrier-free accessibility in the built environment also gained importance, as the number of people with mobility difficulties will increase with Singapore's ageing population.

The construction industry has remained relatively resilient in the economic recession, continuing to register strong year-on-year growth in each of the quarters from 3Q 08 to 2Q 09. Over the next 2 years, construction demand is expected to remain strong, fuelled by ongoing mega projects such as the Integrated Resorts, Marina Business Financial Centre, Downtown MRT Line and petrochemical plants. Private construction demand from residential and commercial developments is also expected to rise as the economy recovers. In 2010 – 2011, annual construction demand is forecasted to reach between S\$20 and S\$27 billion.

Amidst strong growth of the industry in the downturn, construction companies continue to demand manpower for a wide range of jobs ranging from Civil Engineers, Quantity Surveyors and Facilities Management Executives, to rank-and-file positions such as Welders and Construction Foremen.



CONSTRUCTION – EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Civil Engineer	Plan and manage projects to ensure construction is done according to the engineering design. Carry out maintenance strategies to ensure existing structures are safe.	\$3,230 - \$5,000	Diploma / Degree in Civil / Environmental Engineering
Quantity Surveyor	Perform costing and estimation of works required for a construction project. Involved in contract management and cost control during the construction phase.	\$2,900 - \$4,250	Degree in Quantity Surveying / Building Science / Project Facilities Management PCP for Assistant Quantity Surveyor (Specialist Diploma in Building and Cost Management)
Land Surveyor	Measure distances, directions and angles between points on the Earth's surface to establish land maps and boundaries.	\$3,000 - \$4,200	Diploma in Civil Engineering / Land Surveying
Green Mark Manager	Carry out detailed design, prediction and enhancement of building performance for Green Mark certification and implementation.	\$2,600 - \$3,500	Diploma in Sustainable Urban Design & Engineering
Facilities Management Executive	Ensure that facilities and common areas of a building are properly maintained. Prepare budgets of the building's expenses.	\$2,500 - \$3,500	Diploma / Degree in Building Science / Real Estate / Facilities Management PCP for Facilities Management Executives (Specialist Diploma in Facility and Energy Management)

CONSTRUCTION – NON EXECUTIVE JOBS

Job Title	Job Description	Wage Range	Relevant Qualifications & Training Pathways
Welder	Weld metals or plastics together using open electric arcs or flames and other equipment.	\$1,620 - \$2,900	PSLE / GCE 'N' / 'O' Levels
Supervisor And General Foreman (Building Trades)	Supervise construction workers of various trades and oversee the construction project.	\$2,000 - \$3,200	PSLE / GCE 'N' / 'O' Levels / Nitec in Building Drafting (Civil & Structural)
Plumber / Pipefitter	Install, maintain and repair different types of pipe systems such as water, waste disposal, drainage and gas systems.	\$1,450 - \$2,180	PSLE / GCE 'N' / 'O' Levels
Electrical Wiring Installer	Install and maintain the wiring, fuses and other components of building electrical systems. Use various equipment such as screwdrivers, wire strippers, drills and ammeters.	\$1,400 - \$1,700	PSLE / GCE 'N' / 'O' Levels / Nitec in Electrical Technology (Power & Control)

CONSTRUCTION – JOB FEATURE

Quantity Surveyor

Job Description	Wage Range	Qualifications & Training Pathways
Perform costing and estimation of works required for a construction project. Involved in contract management and cost control during the construction phase.	\$2,900 - \$4,250	Degree in Quantity Surveying / Building Science / Project Facilities Management PCP for Assistant Quantity Surveyor (Specialist Diploma in Building and Cost Management)

Quantity surveyors are involved in the costing and estimation of works required for a construction project. The work of a quantity surveyor is office-based and includes costing and detailing the quantities of items required for a building project before the tender is called.

Quantity surveyors are also involved in contract management and cost control during the construction phase of the project. In addition, they are required to monitor the performance of assistant quantity surveyors to ensure that their work constantly achieves the required standard of precision and accuracy.

With continued strong growth of the construction industry during the economic downturn, demand for construction professionals such as quantity surveyors has remained strong. In the longer term, ongoing mega projects such as Downtown MRT Line and petrochemicals, as well as a recovery in the residential and commercial development market, will sustain demand for quantity surveyors. Jobseekers looking to transit into this job can undergo WDA's Professional Conversion Programme for Assistant Quantity Surveyors to obtain the Specialist Diploma in Building and Cost Management.

DATA SOURCES

1. Gross Domestic Product (GDP): Economic Survey of Singapore
2. Index of Industrial Production (IIP): Economic Survey of Singapore
3. General business expectations and employment forecast: Business Expectations Survey
4. Visitor arrivals: Singapore Tourism Board
5. Hotel Standard Average Occupancy Rate (AOR): Monthly Hotel Returns, Singapore Tourism Board
6. Retail Sales Index (RSI): Monthly Retail Sales Survey
7. Container throughput: Maritime and Port Authority of Singapore
8. Hospital admission rate: MediClaim System, Ministry of Health
9. Health facilities: Ministry of Health
10. Creative Industries statistics: Ministry of Information, Communications and the Arts
11. Construction Tender Price Index: Building and Construction Authority