Hiring Your Dream Tech Team in Singapore

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EDB SINGAPORE

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Introduction

For any business, getting the right talent is half the battle won. If you believe in the importance of human resources, Singapore is the ideal location for your company.

First, Singapore's workforce is ranked among the world's best. The country leads Asia-Pacific in the 2021 Global Talent Competitiveness Index and ranks second globally after Switzerland.

In addition, Singapore is an ideal springboard for one of the fastest and most dynamic regional economies in the world, Southeast Asia (SEA). Given the region's growing middle class and strong connection to Asia's growth engine, SEA offers a wealth of opportunities for businesses. Add Singapore's unique brand of top talent into the equation, and companies are well-positioned to achieve scale and success.

Section 1 on page 06 of this guidebook, developed by the Singapore Economic Development Board (EDB), provides an overview of the manpower landscape here, including our education system and manpower policies. Go straight to Section 2 on page 13 if you want to read specifically about tech talent. We consider hiring trends and challenges in Section 3 on page 27, and provide additional information on work passes and government-supported programmes for employers in Singapore, as well as salaries, in Section 4 on page 31.

About EDB

A government agency under the Ministry of Trade and Industry, EDB is responsible for enhancing Singapore's position as a global centre for business, innovation, and talent. We also work with other government agencies to ensure that your company is supported by a positive business environment and a strong workforce in Singapore.

We look forward to partnering you in your journey and hope you will find this guide helpful.

What You Need to Know
About Manpower in Singapore

Securing Your First Hires

Now that you have a solid business expansion plan and are ready to launch in Singapore, a key consideration could be hiring suitable talent. Are the prospective talent tech-ready? Can they code and work well with both machines and humans?

Before we get into how you can assemble your dream tech team in Singapore, let us first take a look at the composition of Singapore's workforce.[01, 02]

Singapore has a labour force of about 3.7 million people, with an employment rate of 97.3% among the 15–64 age group. Some 59.9% of the country's workforce hold professional, managerial, executive, and technical (PMET) roles, and 58.9% of the resident workforce has completed tertiary education.

For a more comprehensive overview of how Singapore helps you build your A-teams, check out our "Hiring in Singapore" page.

Discover more

Find out how tech companies are leveraging Singapore's unique pool of leadership talent here.

Singapore's Education Ecosystem

The Singapore Government invests significantly in education. In 2022, the budget allocated for education was projected at S$13.6 billion (US$10.12 billion) — the country's third highest expenditure after defence and health.

Singapore's host of post-secondary and tertiary education institutes supplies a steady stream of graduates to the local workforce every year. These education institutions also support the workforce's lifelong learning pursuits through modular and industry-relevant courses.

Singapore's universities are well regarded globally, with the National University of Singapore (NUS) and Nanyang Technological University (NTU) taking the 11th and 19th places respectively in the 2023 QS World University Rankings.[03]

Given the close connection between industry and education institutions, Singapore's workforce stays future-oriented and adaptive.

Singapore's post-secondary and tertiary education institutes include:

- 6 National Universities
- 5 Polytechnics
- 3 Institutes of Technical Education (ITEs)

Singapore's Universities

National University of Singapore (NUS)

NUS is a comprehensive university with 17 faculties and schools, including two medical schools and a music conservatory. NUS' offerings include the NUS Overseas Colleges, where students intern at global startups while studying at renowned partner universities; Block 71, a tech startup ecosystem builder; and Roots & Wings, a life skills programme that primes students for future success in a fast-paced workplace environment.

Nanyang Technological University (NTU)

NTU has colleges in the areas of engineering, science and business, among other disciplines. NTU also offers premier programmes such as its flagship Renaissance Engineering Programme where students spend the third year of their course at partner universities and do a professional attachment overseas.
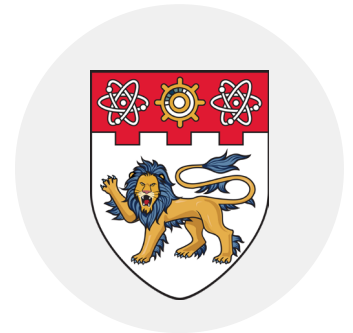
Singapore Management University (SMU)

SMU is a specialised university with six schools offering programmes in accountancy, business management, economics, information systems, law and social sciences. Its pedagogy features an interactive project-based approach to learning. It also offers the SMU-X curriculum, where students take modules that allow them to work on real-world industry problems under the guidance of experienced faculty and industry figures.

Singapore University of Technology and Design (SUTD)

Established in collaboration with the Massachusetts Institute of Technology and Zhejiang University, SUTD is a specialised and research-intensive university that focuses on design education in engineering and architecture.

Singapore Institute of Technology (SIT)

SIT is one of the universities pioneering the applied degree pathway, integrating learning, industry and community. It offers its own applied degrees, as well as degree programmes in partnership with reputable overseas universities. The Integrated Work Study Programme (IWSP) is a unique feature across all of SIT's own applied degrees, allowing students to develop deep specialist skills via early exposure to industry.

Singapore University of Social Sciences (SUSS)

As one of the universities pioneering the applied degree pathway, SUSS provides an applied education experience for both fresh school leavers and adult learners in the domain of the social sciences, as well as in disciplines with a strong impact on human and community development. The Integrated Work Study Programme (IWSP) is a unique feature across all of SIT's own applied degrees, allowing students to develop deep specialist skills via early exposure to industry.

To give you a better idea of the salary expectations of fresh graduates in Singapore, a snapshot of the salaries commanded by university graduates in full-time employment, in fields ranging from computing to humanities and social sciences, is provided on .

Polytechnics

Singapore's polytechnics offer full-time and part-time programmes leading to diplomas in disciplines such as business, chemical and bio-sciences, communications, design, digital media, engineering and manufacturing.

- Nanyang Polytechnic (NYP)
- Ngee Ann Polytechnic (NP)
- Republic Polytechnic (RP)
- Singapore Polytechnic (SP)
- Temasek Polytechnic (TP)

Institutes of Technical Education (ITEs)

Offer full-time and part-time courses leading to vocational certificates for a wide range of industries.

- ITE College Central
- ITE College East
- ITE College West

Manpower Policies Employers Must Know

Singapore is committed to ensuring companies can assemble their A-teams here to deliver impact. In 2022, the city-state introduced enhancements to its work pass framework to provide greater transparency, more flexibility, and reduce visa processing times. Here is a broad overview of the legal considerations you should consider.

Employment Act

The Employment Act is Singapore's main labour law. It outlines the basic terms and working conditions for all types of employees, with some exceptions.

More information on policies on leave, public holidays, hours of work, overtime and part-time employment can be found here.

Work Visas

Employers should identify suitable pass categories, assess their employees' eligibility and get details here on how to apply.

Passes	Purpose
Work Permit	For semi-skilled foreign workers in the construction, manufacturing, marine, process or services sectors
S Pass	For mid-level skilled staff with a minimum salary value of S$3,000 (US$2,211) a month*
Employment Pass	For managerial, executive or specialised workers with a minimum salary value of S$5,000 (US$3,701) a month*
EntrePass	For eligible foreign entrepreneurs wanting to start and operate a new business in Singapore
TechPass	For tech entrepreneurs, leaders or technical experts to come to Singapore to pursue frontier and disruptive innovations
Overseas Networks and Expertise Pass (ONE Pass)	For top talent across all sectors, including in business, arts and culture, sports, as well as academia and research.

Dependency Ratio Ceiling

The Dependency Ratio Ceiling (DRC) refers to the maximum proportion of foreigners on work permits and S-passes that a company can hire. These ratios differ from sector to sector, and do not apply to employment pass (EP) holders whose numbers are not capped.

For example, as of June 2022, the DRC for the infocomm service sector's work permit holders is 35 per cent. This means up to 35 per cent of an infocomm company's total workforce may consist of work permit holders. To calculate the DRC, check out this Foreign Worker Quota Calculator.

While the DRC does not apply to EP holders, there are some conditions that companies must adhere to before hiring these skilled foreign employees.

For instance, they must advertise the job vacancies on the national Jobs Bank administered by Workforce Singapore (WSG) before submitting EP applications. You can read more about the Fair Consideration Framework here.

Local Qualifying Salary

The Local Qualifying Salary (LQS) determines the number of local employees who can be used to calculate your Work Permit and S Pass quota entitlement. The LQS was previously known as the Full-Time Equivalent salary.

The LQS ensures that local workers are employed meaningfully, rather than being employed on token salaries to allow the employer access to migrant workers. Find out more here.

Complementarity Assessment Framework (COMPASS)

Starting from 1 Sept 2023, besides meeting a qualifying salary, EP candidates must fulfill the criteria set out in the points-based COMPASS framework. COMPASS enables employers to select high-quality foreign professionals, while improving workforce diversity. The framework evaluates EP applications based on a holistic set of individual and firm-related attributes. To pass the assessment, candidates require a minimum of 40 points. Find out more about COMPASS here.

Individual Attributes	Firm-Related Attributes
Foundational Criteria	
C1. Salary Relative to local PMET salary norms for sector	**C3. Diversity** Whether candidate improves nationality diversity in firm
C2. Qualifications Based on candidate's qualifications	**C4. Support for Local Employment** Based on local PMET share relative to industry peers
Bonus Criteria	
C5. Skills Bonus **(Shortage Occupation List)** For candidates in jobs where skills shortages exist	**C6. Strategic Economic Priorities Bonus** For partnership with Government on ambitious innovation or internationalisation activities

Central Provident Fund for Singaporeans and PRs

The Central Provident Fund (CPF) is a mandatory social security savings scheme funded by contributions from employers and employees. Employers are required to pay both the employer and employee's share of CPF contributions every month and are entitled to recover the employee's share from the employee's wages.

Find out more about the CPF, who is entitled to CPF contributions and what employers need to do here.

Tripartism

Tripartism in Singapore refers to the collaboration among unions, employers and the Government. The tripartite partners are the Ministry of Manpower (MOM), National Trades Union Congress (NTUC) and Singapore National Employers Federation (SNEF).

It has helped boost Singapore's global competitiveness, promoted harmonious labour-management relations and contributed to Singapore's overall economic progress.

It will also continue to underpin Singapore's efforts for collective and inclusive growth for all involved. The tripartite committees and initiatives provide guidelines and recommendations on issues such as wages, fair employment and employing older workers.

The Tripartite Standards are a new tripartite initiative which helps organisations with good practices distinguish themselves. They complement our laws, tripartite guidelines, and advisories to increase the adoption of fair and progressive workplaces practices in Singapore.

Fair Consideration Framework

The Fair Consideration Framework (FCF) details fair hiring requirements for companies in Singapore, including advertising in the National Jobs Bank and scrutinising companies with suspect hiring practices. It is part of the Government's overall effort to encourage a diverse workforce and ensure local talent are well-leveraged.

It sets out clear expectations for all Singapore-based companies to consider Singaporeans fairly for job opportunities. These companies must comply with the tripartite guidelines on Fair Employment Practices and have fair employment practices that are open, merit-based and non-discriminatory.

Discovering Tech Talent in Singapore

Singapore: Where Tech Talent Thrives

From a port city, the island-state has transformed into a thriving and robust technology ecosystem, or as former Hewlett Packard Enterprise CEO Meg Whitman coined it, a "miniature Silicon Valley" in the heart of Southeast Asia.

When it comes to hiring tech specialists, Singapore is one of the world's most attractive locations and home to top candidates in the space, given its vibrant tech ecosystem, strong pipeline of tech workers, and access to the global talent pool.

Today, many top tech firms in the world, including the likes of Google, Meta and Alibaba, have a presence in Singapore. The city-state is also home to unicorns and fast-growing startups, such as Carousell and Bytedance.

Google houses the majority of its senior management team here in Singapore, the company's Asia-Pacific headquarters. Singapore also houses its engineering team for payments and the Next Billion Users (NBU) initiative.

Grab, a leading superapp in Southeast Asia offering delivery, mobility and financial services, is also headquartered here, overseeing operations in over 400 cities across eight countries in the region.

- **Singapore remains an attractive location for companies looking to establish local and regional hubs. According to a 2021 salary survey by professional recruitment consultancy Robert Walters, Singapore saw continued active recruitment for tech professionals — particularly for roles in emerging technologies, such as AI, cybersecurity and machine learning — as well as data scientists and architects for data management roles. The same survey indicated that 69 per cent of tech professionals were looking for a new job in 2021.**

  Source: Robert Walters

What Attracts Global Talent

Amidst global economic headwinds, Singapore is one of the world's strongest and most attractive economies to work in.

According to a survey conducted by the Ministry of Manpower in late 2021, information technology and multimedia development roles remained highly sought after — among PMET roles — as digital technologies play a pivotal part in today's economy.
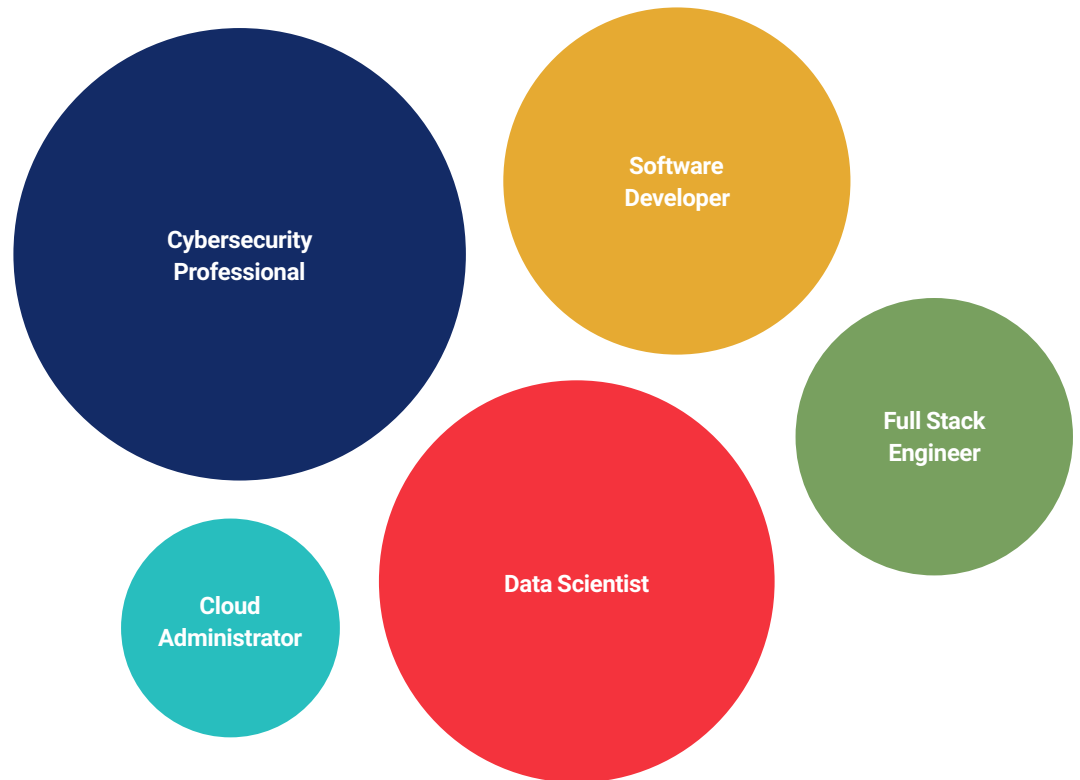
Beyond sales, marketing and business development functions, tech companies are also increasingly looking for software developers, data analysts and product managers.

Top 5 Most In-Demand Tech Jobs in Singapore

Cybersecurity Professional

Software Developer

Full Stack Engineer

Cloud Administrator

Data Scientist

Source: EPS Singapore 2021

An Ecosystem of Top Tech Firms

Singapore already hosts a diverse cluster of big tech companies that provide resources and early funding opportunities for startups. Asia Partners' 2021 Southeast Asia internet report also noted that Singapore had the highest concentration of senior tech leadership, data programmers and scientists within the Southeast Asian region.

Bigger tech companies tend to have longer interview processes, so one thing tech startups can focus on is having fewer interview sessions. Startups usually have smaller teams, and many times, senior team members or even company founders will conduct the job interviews. This is a massive opportunity for the startup to convey the passion and vision of the company, and that can come across as more inspiring when you hear it from the founder. Tech startups can offer more project ownership as teams are usually smaller and processes are shorter and less structured. That also means more opportunities for career and leadership growth and regional work.

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Aarti Budhrani
Director, Michael Page Singapore

How to Reach Tech Talent in Singapore

The rise of tech means more job channels dedicated to tech talent procurement. Here are some tech-dedicated recruitment channels your company can tap on to access our talent pool.

Global Agencies with a Tech Focus	
Morgan McKinley	The professional services recruitment consultancy connects specialist talent with employers across a wide range of industries and disciplines. Tech is one of the firm's focus areas in Singapore.
Salt	Salt is a global digital recruitment agency specialising in Creative, Marketing, Sales and Technology sectors.
International Job Portals	
LinkedIn	The world's largest professional network with more than 562 million users in more than 200 countries and territories worldwide.
Glassdoor	The global job site has ratings and reviews of over 600,000 companies. It also provides personalised salary estimates based on each jobseeker's work experience and today's job market.
Indeed	Indeed has over 200 million unique visitors every month and provides free access to search for jobs, post resumes, and research companies.
Asia-Focused Job Portals	
Jobstreet	Founded in Malaysia in 1997, JobStreet is one of Asia's leading employment marketplace and the top job portal in Singapore, hosting over 57,000 job openings.
Tech in Asia Jobs	The job portal of Asia's largest English language technology-focused news site. The new and effective platform has over 4,000 job listings from Asia's tech companies.
Startup Jobs Asia	With a strong focus on start-ups, the platform aims to match companies with job seekers who will thrive in a growing business environment. It focuses on jobs in Singapore and Asia.
Boutique Agencies/Startups	
Wantedly	The platform is aimed at connecting people and companies based on passions and values, rather than salary and benefits.
Glints Jobs	A platform targeted especially at young people in Asia, the firm focuses on matching young adults to internship and permanent employment opportunities.
Kaishi	Initially set up to meet the recruitment demands of the early stage investment and tech community in Singapore, Kaishi now has clients across China, Europe and North America.

How to Reach Tech Talent in Southeast Asia

From Singapore, companies can also look beyond the city-state to tap on the region's digital talent. With strong connectivity with other tech nodes in the region, it is becoming increasingly easy to collaborate and coordinate with developers, product managers and designers across Southeast Asia.

One such example is Nongsa D-Town. Nicknamed "The Digital Bridge between Singapore and Indonesia", Nongsa grew out of the existing tech ecosystem at Nongsa Digital Park and the creative community that is spawned from Infinite Studio's animation and film studio that has been in Nongsa for over a decade. Nongsa D-Town is designed with the tech and creative industries in mind, with the intention to grow a digital ecosystem filled with regional talent from Indonesia and Singapore.

This arrangement is a win-win situation for both employers and prospective employees, as an operation in Nongsa also serves as a springboard for international companies that want to expand into the Indonesian market out of Singapore.

There is also the geographical advantage of establishing a tech team in Nongsa for multinational organisations — Batam's close proximity to Singapore allows it to serve as a launchpad for Singaporean companies, as the 40-minute commute between the two islands makes it possible for an executive or entrepreneur working in Singapore to visit the tech team in Nongsa and return home within a single day.

Tech Talent Salaries

Starting salaries of tertiary graduates hired in the tech sector vary widely, depending on their educational background. Besides universities, polytechnics also provide continuing education and post-employment professional development programmes and services. Today, polytechnic graduates are valued as practice-oriented and knowledgeable professionals, much sought after by various industries, including Infocomm Media (ICM).

Course Cluster	Degree	Abbreviation	University	Employment Rate (%)	Median Monthly Gross Starting Salary
University Graduates					
Computing	Bachelor of Computing (Computer Science) (Honours)	B.Comp. (H)	NUS	99.1	S$6,000 (US$4,483)
	Bachelor of Science (Information Systems Management)	B.Sc. (ISM.)	SMU	98.2	S$5,000 (US$3,736)
Engineering	Bachelor of Engineering (Computer Science)	B.Eng. (Comp.Sc.)	NTU	97.0	S$4,800 (US$3,586)
	Bachelor of Engineering (Computer Engineering)	B.Eng. (Comp. Eng.)	NUS, NTU	95.8	S$4,500 (US$3,362)
	Bachelor of Science (Information Systems Management)	B.Sc. (ISM)	SMU	95.7	S$4,200 (US$3,138)
	Bachelor of Science (Business Analytics)	B.Sc. (BA)	NUS	100	S$5,400 (US$4,035)
Polytechnic Graduates					
Built Environment, Engineering & Maritime	Business Process & Systems Engineering; Industrial and Operations Management	Ind. Ops. Mgmnt	RP, TP	55.7	S$2,250 (US$1,681)
	Computer Engineering; Electronics; Electronic & Computer Engineering; Electronics; Computer & Communications	Comp. Elect.	NYP, NP, TP	76.2	S$2,400 (US$1,793)
Information & Digital Technologies	Business Applications; Business Information Systems; Business Information Technology	Bus. IT.	RP, SP	48.6	S$2,370 (US$1,771)
	Information Technology	Info. Tech.	NYP, NP, RP, SP, TP	66.3	S$2,500 (US$1,868)

Course Cluster	Degree	Abbreviation	University	Employment Rate (%)	Median Monthly Gross Starting Salary
Post-National Service Polytechnic Graduates					
Information & Digital Technologies	Information Technology	Info. Tech.	NYP, NP, RP, SP, TP	64.4	S$2,630 (US$1,965)

Note: In Singapore, all male citizens and second-generation permanent residents must undergo a period of compulsory service, commonly known as National Service (NS), in the uniformed services. Male citizens and permanent residents typically serve this before entering the workforce. Beyond fresh graduates, these salaries may indicate the industry standard for tech-focused roles. **Source**: MOM, Latest as of Feb 2023

Costs to Build a Tech Team

Discover more

Learn from Zuhlke and Twitter on how they built their tech teams in Singapore.

There are two factors to consider for a local tech team — how much your developers will receive; and how large your software team will be. There are various factors that may influence a developer's salary in Singapore.

Mr Seah Ying Cong, Chief Technology Officer of Glints, a regional talent platform, notes that salaries in tech largely depend on type of company (early/late startup, small and medium-sized enterprise, multinational company, etc.) and the specific industries the company is in (banking, web3, etc.). Software engineering reputation and specific industry vertical experience, can also play a part in determining developers' pay.

Across all organisation sizes, the size of your tech team depends on whether your company is technology-first. A technology-first company may embed technology into the very lifeblood of its products, systems, and processes, which would naturally lead to a higher proportion of tech professionals, especially if said company is growing, as there may be a continuous requirement to improve existing systems.

Next, consider if your company is willing (and able) to pay a premium for tech talent. In Singapore, better funded startups and larger tech giants such as Bytedance, Apple, Meta, and Microsoft are known to pay fresh technology graduates starting salaries of more than S$7,500 (US$5,404) per month.

Securing Experienced Hires

While fresh graduates bring new perspectives and a hunger for growth at the entry level, a dream team will certainly require the insights of experienced professionals. Companies can look forward to both government programmes and market partners to attract and secure experienced hires.

Tech@SG

Singapore recognises that companies need all the help they can get when it comes to securing tech talent, especially when they have critical skills needed to unlock the next stage of growth.

To complement local recruitment and training programs, tech companies can use Tech@SG to get company-level endorsement with the Ministry of Manpower (MOM) for up to 10 new EPs over two years, and reduce the risk of rejection for EP applications.

Global Networks

If you are looking to expand your connections with prospective talent, the Singapore Global Network (SGN) is a great networking platform for you to get connected to industry professionals in Singapore and abroad. Gain access to their 70,000-strong international community through social and professional networking events, industry talks and career sessions organised with participating companies and partners.

SGN also offers resources such as promotion of job opportunities through their e-newsletters and jobs page, as well as various relocation guides which might be useful in your hiring journey.

Specialised Hiring Partners

Partner with recruitment and executive search firms that operate across regions and industries to find the ideal fit for roles in your company. This includes Adecco, Kaishi Partners, Morgan McKinley and others who have built a regional awareness of the best ways to attract and retain experienced talent.

Read more about this on "How to Reach Tech Talent in Singapore" on page 16.

You can use EDB's Connections Concierge to get connected.

Salaries for Experienced Hires

Widespread demand for tech talent has put a premium on experienced recruits, and companies have to be prepared to meet global benchmarks to attract top talent to their teams. The following tables provide a ballpark for salaries for senior personnel in the industry.

Tech & Transformation Roles, Commerce

	Role	Permanent Salary Per Annum	Contract Salary Per Month
Management	Chief Information Officer	S$300–600k (US$223–446k)	S$30–60k (US$22–44k)
	IT Director	S$200–450k (US$148–334k)	S$16–25k (US$11–18k)
Projects and Change	Program Manager	S$200–350k (US$148–260k)	S$15–25k (US$10–18k)
	Infrastructure Project Manager	S$120–250k (US$89–185k)	S$11–20k (US$8–14k)
	Applications Project Manager	S$120–250k (US$89–185k)	S$9–20k (US$6.6–14k)
	Service Delivery Manager	S$120–200k (US$89–148k)	S$9–20k (US$6.6–14k)
	Business Analyst	S$120–200k (US$89–148k)	S$8–18k (US$5.9–13k)
Infrastructure	Head of Infrastructure	S$180–280k (US$133–208k)	S$15–20k (US$11–14k)
	IT Manager	S$120–210k (US$89–156k)	S$8–18k (US$5.9–12k)
	Technical Lead	S$100–170k (US$74–126k)	S$10–20k (US$7.4–14k)
	Database Administrator	S$100–150k (US$74–129k)	S$8–18k (US$6–13k)
	Solutions Architect	S$120–240k (US$89–178k)	S$12–20k (US$8.9–14k)
	Cloud Engineer	S$120–200k (US$89–148k)	S$8–15k (US$5.9–11k)
	Network/Systems Manager	S$100–170k (US$74–126k)	S$9–16k (US$6.6–11.9k)
	Network/Systems Engineer	S$75–150k (US$55–111k)	S$7–13k (US$5.2–9.6k)
	Systems Administrator	S$60–120k (US$44–89k)	S$6–12k (US$4.4–8.9k)
	Help Desk	S$60–90k (US$44–66k)	S$4–10k (US$2.9–7.4k)
Applications and Development	Chief Technology Officer	S$200–550k (US$148–409k)	S$15–40k (US$11–29k)
	VP Engineering	S$180–450k (US$133–334k)	S$15–22k (US$11–16k)
	Solutions Architect	S$120–300k (US$89–223k)	S$12–20k (US$8.9–14k)
	Software Engineer	S$85–240k (US$63–178k)	S$7–16k (US$5.2–11.9k)
	Development Manager	S$108–240k (US$80–178k)	S$12–22k (US$8.9–16k)
	Developer	S$100–220k (US$74–163k)	S$7–16k (US$5.2–11.9k)
	Application Support Analyst	S$85–150k (US$63–111k)	S$5.5–10k (US$4–7.4k)
	Systems Analyst/Tester	S$65–150k (US$48–111k)	S$6–10k (US$4.4–7.4k)

IT Product & Engineering Salaries in Technology, Telecommunication and Fintech (Per Annum)

Role	5–10 years' experience	10–15 years' experience	15+ years' experience
Software Engineering, Front End	S$65–100k (US$48–74k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)
Software Engineering, Back End	S$65–100k (US$48–74k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)
Software Engineering, Full Stack	S$75–100k (US$55–74k)	S$100–200k (US$74–148k)	S$200–350k (US$148–260k)
Mobile Engineering (Android/IOS)	S$65–90k (US$48–66k)	S$90–150k (US$66–111k)	S$150–200k (US$111–148k)
Quality Assurance/Testing	S$55–75k (US$40–55k)	S$75–140k (US$55–104k)	S$140–220k (US$104–163k)
UI/UX	S$40–85k (US$29–63k)	S$85–150k (US$63–111k)	S$120–240k (US$89–178k)
Product Management	S$60–90k (US$44–66k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)
Business Intelligence/ Data Engineering	S$60–90k (US$44–66k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)
Data Science/AI	S$60–90k (US$44–66k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)

Source: Morgan McKinley, Latest as of March 2023

IT Product & Engineering Salaries in Banking & Financial Services (Per Annum)

Role	5–10 years' experience	10–15 years' experience	15+ years' experience
Software Engineering, Front End	S$65–100k (US$48–74k)	S$100–180k (US$74–133k)	S$180–300k (US$133–233k)
Software Engineering, Back End	S$65–100k (US$48–74k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)
Software Engineering, Full Stack	S$75–100k (US$55–74k)	S$100–200k (US$74–148k)	S$200–350k (US$148–260k)
Quality Assurance/Testing	S$55–75k (US$40–55k)	S$75–140k (US$55–104k)	S$140–220k (US$104–163k)
UI/UX	S$40–85k (US$29–63k)	S$85–150k (US$63–111k)	S$140–240k (US$104–178k)
Business Intelligence/ Data Engineering	S$60–90k (US$44–66k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)
Data Science/AI	S$60–90k (US$44–66k)	S$100–180k (US$74–133k)	S$180–300k (US$133–223k)

Source: Morgan McKinley, Latest as of March 2023

Talent Development for Tech Needs

In Singapore, the private and public sectors collaborate actively to create training opportunities and build a strong pipeline of tech talent for the industry. The examples below demonstrate how firms are working with the authorities on talent development. Companies here can look forward to open conversations with the government on partnering for such programmes.

Read on for examples of these partnerships!

How Tech Giants Train Talent in Singapore

Google Skills Ignition

Launched in July 2020, Google has since enrolled over 2,600 participants under its Skills Ignition SG programme. The training programme equips trainees with skills needed to be job-ready in Digital Marketing or Cloud Technology. Trainees either undergo six months of vocational training or three months of vocational training and six months of on-the-job training with Google and participating companies.

Microsoft #GetReadySG

#GetReadySG is a national skills initiative co-created by Microsoft and Generation Singapore, in partnership with Digital Industry Singapore (DISG), Infocomm Media Development Authority (IMDA) and SkillsFuture Singapore (SSG). The initiative aims to train 1,000 fresh graduates and mid-career Singaporeans for tech roles in full-stack software development, DevOps, business intelligence, and more.

IBM i.am-vitalize

i.am-vitalize is a certifiable training programme that aims to equip participants with the foundation to become an adaptable business executive who are proficient with in-depth IT expertise. The programme features a combination of foundational and elective elements to supplement participants' market-relevant skills over a structured six month course.

Sea Company-Led Training

In partnership with IMDA, Sea Group has committed to hiring and training for 500 highly-skilled technical roles. Trainees undergo a six month programme at Sea and Shopee to prepare them for e-commerce and tech roles, such as data/business analyst, product manager, software engineer and UI/UX designer.

Immersion Programmes Provided by Companies

ThoughtWorks JumpStart!

ThoughtWorks JumpStart! is a three month coaching and mentorship programme for individuals who want to build and develop specialised skills in software development using agile engineering and software delivery practices to jumpstart their careers in tech.

Through the programme, participants will learn best engineering practices and skills that can help them to create valuable working software, including essential programming fundamentals, agile software development practices and full-stack application development.

General Assembly

General Assembly helps people master new skills in design, marketing, technology, and data — online or in campuses around the world. Over 45 per cent of General Assembly's part-time students receive tuition reimbursement from their employers.

Immersive training courses with placement:

- Software Engineering Immersive (WDI)
- User Experience Design Immersive (UXDI)
- Digital Marketing Immersive (DMI)
- Data Science Immersive (DSI)

Government Training Programmes

Singapore offers comprehensive training for workers to cultivate future-ready skills. These identified skill sets are increasingly applicable across our globally-competitive industries and bring fresh talent to tech companies. Here are some initiatives that companies may tap on to build their employees' skills.

SkillsFuture

SkillsFuture is a national movement to provide Singaporeans with opportunities to develop their potential to the fullest throughout their lives, regardless of their starting points. The movement ensures that students and working adults have access to high quality, industry-relevant training throughout life.

To find out more on how SkillsFuture can benefit your company, click here.

TechSkills Accelerator

TechSkills Accelerator (TeSA) is an initiative driven by Singapore's IMDA in partnership with other government agencies and industry partners.

Under this initiative, training programmes are available to help fresh graduates or mid-level professionals in the ICM or STEM disciplines deepen tech skills.

How Does This Benefit Employers?

If you are seeking fresh and/or mid-career ICM professionals for your company or looking to develop existing employees with the relevant ICM skills, consider applying for this programme. You will:

- Receive funding support to implement the respective training programmes.
- Be able to employ ICM professionals who are undergoing or have undergone training to meet the needs of your company.
- Be able to upskill and deepen the skills of existing employees who are mid-level ICM professionals.

Details of Selected Programmes

Schemes	Purpose	Benefits to Company
Work-Study Post Diploma (WSPostDip)	Targeted at fresh graduates from the Polytechnics, WSPostDip provides them with a head-start in their careers related to their discipline of study and extensive opportunities to build on the skills and knowledge they acquired in school through a work-study arrangement. Participating employers can recruit local fresh graduates, within three years of graduation or the Operationally Ready Date for full-time National Servicemen, and prepare them to take up suitable job roles.	• Be able to groom and retain suitable talent with the relevant skills and aptitude to meet the needs of the company. • Receive a grant of up to S$15,000 (US$10,809) per individual placed in the WSPostDip to defray the costs of developing and providing structured on-job- training and to encourage them to set out career progression pathways.
Career Trial	Allows employers to assess a jobseeker's fit via a cost-free short-term work stint before offering employment.	• Receive 30 per cent of monthly salary support for up to six months, capped at S$5,400 (US$3,891) per hire, for employers who hire unemployed Singapore Citizens who have been actively looking for jobs for six months or more. • Get training allowance for jobseekers from S$7.50–15/hr (US$5.40–10.80/hr), up to three months.

Professional Career Conversion Programme (CCP)	Targeted at Professionals, Managers, Executives and Technicians (PMETs), including mid-career switchers, to undergo skills conversion and successfully transit into new occupations or sectors that have good prospects and opportunities for progression. It helps companies to attract and re-skill local PMETs in growth and demand areas.	• Facilitate recruitment of mid-career switchers to meet employers' manpower needs
		
		• Leverage structured industry-recognised training
		
		• Minimise redundancies and reskill experienced employees to take on new job roles
		
		• Tap on funding through course fee grant and salary support/training allowance
		   • Support of up to 90 per cent of monthly salary capped at S$6,000/month (US$4,323/month)
		   • Support of up to 90 per cent of course fee funding

For more information on meeting your hiring and training needs, refer here.

Hiring Trends & Challenges in Asia

Now that you have a better understanding of hiring in Singapore, it is useful to take stock of hiring challenges and trends in the tech space in Asia, such as gender diversity and an ageing population, and find out how the country is dealing with these issues.

Furthermore, the COVID-19 pandemic has changed workplaces and employee roles, with working from home or remotely becoming the new norm. Companies have had to relook their recruitment strategy for a post-pandemic world.

Agile companies that can respond to these trends and adapt their hiring methods would be better positioned to take advantage of emerging opportunities as they present opportunities to innovate with heart.

Ageing Population

First, while Asia currently has a relatively larger youth population; it is also ageing. The proportion of people aged 60 and above is expected to grow rapidly in the region. In Singapore, the number of seniors aged 65 and above will double to more than 900,000 by 2030.

That said, better medical care and higher educational qualifications are giving older Singaporeans a second wind, and opportunities to embark on new careers in their silver years.

Statistics from the Ministry of Manpower showed that the percentage of workers aged 65 and above who are working or looking for a job rose to 28.5% in 2020, from 14.3% in 2006.[04]

The potential for older workers to keep contributing is huge, but it requires adjustments, not just from the government but also employers, to make workplaces and job scopes more age-friendly. One way the government supports this is through Seniors Go Digital, equipping the elderly with digital literacy skills to be part of the country's digital transformation.

Gender Diversity

Gender diversity is another topic rapidly gaining prominence in Asia. McKinsey, in its *Power of Parity: Advancing Women's Equality in Asia Pacific* report, said Asia Pacific's average gender parity score in work is 0.44, compared to a global best of 0.73. Parity is set at a score of 1.00.

In a commentary published by Singapore's Channel News Asia in January 2019, Dell's Head of Diversity & Inclusion in Asia Pacific, China and Japan also noted that female representation decreases up the corporate ladder specially in the tech industry.

In Singapore, the share of women in tech has hovered around 30 per cent since 2000, according to the IMDA. But in recent years, more events, conferences and advocacy groups aimed at reducing the gender imbalance in the tech sector has sprung up globally and locally. They include the IMDA-driven SG Women in Tech initiative and advocacy groups Girls in Tech and Lean In. More Singapore-based companies are also putting in place policies that help women balance their work and family commitments.

For Mai, data represents the human mission to 'do better'. She has been an essential part of big tech companies such as Grab, pre-IPO Garena (now Sea) and Google, where she has worked on the code behind fraud detection, personalisation and trust and safety features.

Recognising the gap in data literacy in the Southeast Asian community, Mai kickstarted DataKind, a social initiative empowering non-government and non-profit organisations through data science as well as BigDataX, a community that proliferates data engineering literacy in Southeast Asia.Today, Mai oversees the Singapore office as well as the product and data science teams at VNLife. She is also a mother — a role she views as her biggest accomplishment — and says she looks forward to introducing her kids to what she does by bringing them to DataKind events.

A woman's career shouldn't be stopped by the few years of child raising. Singapore's pro-family policies and supportive ecosystem encourage mums to return to the workforce as better versions of themselves, armed with more patience, stronger communication and deeper insight into human psychology.

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Hien Mai Thanh
Head of Data Science, VNLife

Yolyn's plunge in the world of tech started with her leaving the world of shipping to help Google expand its presence in SEA by setting up offices in new markets like Malaysia and Indonesia. Today, Yolyn oversees Google's knowledge and information partnerships in APAC, including Search, Maps and Shopping while continuing to contribute to a broader community in Google by advocating for better diversity, equity and inclusion (DEI).

While she was initially very active in Women@ Google, the internal employee resource group (ERG) for women in tech, overtime, she saw an opportunity through these ERGs to expand the notion of diversity beyond just gender. Yolyn now serves as the executive sponsor for the local chapter of the Asian Googler Network ERG and the co-chair of Google APAC's Global Business Strategy & Operations DEI Council where she continues to be a champion in both her company and the wider ecosystem.

As the executive sponsor of the Asian Googler Network ERG in Google APAC, I see an opportunity to support the expansion of the diversity conversation and to also think about how we could make that conversation relevant in APAC. There is a growing ecosystem in Singapore and the APAC region of women, Asian tech talent and allies coming together to create more equitable workplaces.

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Yolyn Ang
Managing Director, APAC Partnerships, Google

What is Next for You

We hope you have found our guide useful.

Through EDB's role in facilitating local and regional economic development, we have built up a wealth of business insights and a comprehensive network of contacts that new companies setting up in Singapore can leverage.

We hope that we have brought you one step closer to better understanding Singapore's tech ecosystem. The conversation does not end here. At EDB, we partner you to make your Southeast Asia expansion plans a reality. Here are other resources that may be helpful to you:
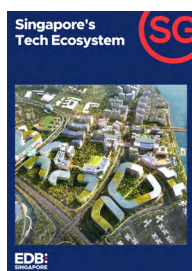
Singapore's Tech Ecosystem

For market insights, industry guides and exclusive events related to SEA's business landscape, subscribe to our monthly newsletter here.
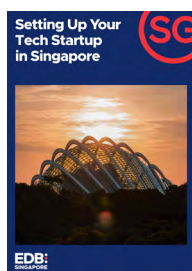
Setting Up Your Tech Startup in Singapore

If you are looking for partners to facilitate your setup in Singapore, you can connect with EDB's curated network of partners through the Connections Concierge.

Ready to take the next step and/or have questions? Reach out to us here.

Follow us on our social channels:

Useful Resources

More about Work Passes

Schemes	Purpose	Details	Links
For Global Talents			
Overseas Networks and Expertise (ONE) Pass	For top talent across all sectors, including in business, arts and culture, sports, as well as academia and research.	Please refer here for more information on ONE Pass	• About working in Singapore • Brochure on ONE Pass
For Employees			
Work Permit	For semi-skilled foreign workers in the construction, manufacturing, marine, process or services sector.	Please refer here for more information on Work Permits.	• Guide on calculating the quota balance • Foreign Worker Quota Calculator • Requirements for Manufacturing Sector • Requirements for Services Sector
S Pass	For mid-level skilled staff	Please refer here for more information on S Pass.	• Guide on calculating the quota balance • Foreign Worker Quota Calculator • Self Assessment Tool
Employment Pass	For managerial, executive or specialised workers	Please refer here for more information on Employment Passes.	• Self Assessment Tool

Schemes	Purpose		Details
For Employers			
Tech@SG	For employers to access the critical talent they need to grow and scale their business in Singapore and the region		More information
For Entrepreneurs			
EntrePass	For eligible foreign entrepreneurs wanting to start and operate a new business in Singapore		More information
TechPass	For tech entrepreneurs, leaders or technical experts to come to Singapore to perform frontier and disruptive innovations		More information
For Trainees			
Training Employment Pass	For foreign students/professionals undergoing training in Singapore		More information
Training Work Permit	For semi-skilled foreign trainees or students undergoing technical training		More information
Work Holiday Pass	For students and graduates aged 18–25 to work and holiday in Singapore		More information

Salary Overview for University Graduates

Course Duration	Course Cluster	Degree	Abbreviation	University	Employment Rate (%)	Median Monthly Gross Starting Salary
4-year	Computing	Bachelor of Computing (Computer Science) (Honours)	B.Comp. (H)	NUS	96.4	S$6,000 (US$4,463)
		Bachelor of Computing (Information Systems) (Honours)	B.Comp (H)	NUS	96.2	S$5,000 (US$3,719)
		Bachelor of Science (Information Systems Management)	B.Sc. (ISM.)	SMU	94.6	S$5,000 (US$3,719)
		Bachelor of Engineering (Computer Science)	B.Eng. (Comp.Sc.)	NTU	91.0	S$4,800 (US$3,570)
		Bachelor of Engineering (Computer Engineering)	B.Eng. (Comp. Eng.)	NUS, NTU	89.6	S$4,500 (US$3,347)
	Engineering	Bachelor of Engineering (Mechanical Engineering)	B.Eng. (Mech.)	NUS, NTU	86.1	S$3,875 (US$2,882)
		Bachelor of Engineering (Electrical Engineering); Bachelor of Engineering (Electrical & Electronic Engineering)	B.Eng. (EEE)	NUS, NTU	93.0	S$4,150 (US$3,087)
		Bachelor of Engineering (Environmental Engineering)	B.Eng. (Enviro)	NUS, NTU	88.6	S$3,500 (US$2,603)
		Bachelor of Engineering (Industrial & Systems Engineering)	B.Eng. (ISE)	NUS	91.8	S$4,500 (US$3,347)
		Bachelor of Engineering (Information Engineering & Media)	B.Eng. (IEM)	NTU	88.6	S$4,200 (US$3,124)
		Bachelor of Engineering (Materials Engineering)	B.Eng. (Matl. Eng.)	NTU	83.0	S$3,650 (US$2,715)

Course Duration	Course Cluster	Degree	Abbreviation	University	Employment Rate (%)	Median Monthly Gross Starting Salary
4-year	Humanities, Social Sciences and Others	Bachelor of Arts (Economics) (Honours)	B.A.Econs (H)	NTU	88.3	S$3,650 (US$2,715)
		Bachelor of Arts (English) (Honours)	B.A.English (H)	NTU	64.2	S$3,500 (US$2,603)
		Bachelor of Arts (Honours)	B.A. (H)	NUS	68.3	S$3,650 (US$2,715)
		Bachelor of Arts (Linguistics and Multilingual Studies) (Honours)	B.A.LMS. (H)	NTU	70.2	S$3,300 (US$2,454)
		Bachelor of Arts (Psychology) (Honours)	B.A.Psych (H)	NTU	71.8	S$3,350 (US$2,492)
		Bachelor of Social Sciences (Public Policy and Global Affairs) (Honours)	B.Soc. Sci..PPGA (H)	NTU	77.1	S$3,804 (US$2,829)
		Bachelor of Arts (Sociology) (Honours)	B.A.Soci (H)	NTU	69.6	S$3,500 (US$2,603)
		Bachelor of Fine Arts (Arts, Design & Media)	B.F.A.	NTU	46.6	S$3,000 (US$2,231)
		Bachelor of Science (Project & Facilities Management)	B.Sc. (Proj & FM)	NUS	92.1	S$3,500 (US$2,603)
		Bachelor of Science (Economics)	B.Sc. (Econ.)	SMU	83.5	S$4,435 (US$3,299)
		Bachelor of Social Sciences (Honours); Bachelor of Social Sciences	B.Soc.Sci. (H) / B.Soc.Sc.	NUS, SMU	77.1	S$3,600 (US$2,678)

Course Duration	Course Cluster	Degree	Abbreviation	University	Employment Rate (%)	Median Monthly Gross Starting Salary
4-year	Science	Bachelor of Science (Physics / Applied Physics)	B.Sc.Phys.	NTU	69.0	S$3,600 (US$2,678)
		Bachelor of Science (Biological Sciences) (Honours)	B.Sc.BS (H)	NTU	81.7	S$3,500 (US$2,603)
		Bachelor of Science (Chemistry & Biological Chemistry) (Honours)	B.Sc.Chem /Bio Chem (H)	NTU	74.4	S$3,400 (US$2,529)
		Bachelor of Science (Honours)	B.Sc. (H)	NUS	76.5	S$3,600 (US$2,678)
		Bachelor of Science (Mathematical Sciences)	B.Sc.Math Sci	NTU	75.6	S$3,806 (US$2,831)
		Bachelor of Science (Mathematics & Economics)	B.Sc. (Maec)	NTU	75.6	S$3,806 (US$2,831)
		Bachelor of Science (Nursing) (Honours)	B.Sc. (Nursing) (H)	NUS	96.8	S$3,750 (US$2,789)
3-year	Business	Bachelor of Accountancy	B.Acc (3 Yr)	NTU	93.0	S$3,400 (US$2,529)
		Bachelor of Business Administration; Bachelor of Business	B.B.A; B.Bus. (3 Yr)	NUS, NTU	85.2	S$4,000 (US$2,975)
	Humanities, Social Sciences and Others	Bachelor of Arts	B.A. (3 Yr)	NUS	70.0	S$3,600 (US$2,678)
	Science	Bachelor of Science	B.Sc. (3 Yr)	NUS	56.9	S$3,527 (US$2,623)
		Bachelor of Science (Nursing)	B.Sc. (Nursing) (3 Yr)	NUS	93.3	S$3,550 (US$2,640)

Data Extracted from Source: MOM, Department of Statistics Yearbook of Manpower Statistics 2022

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Endnotes

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