



2019 Guide To

Hiring Your Dream Tech Team In 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 your human resource, Singapore is an ideal location for your company.

First, Singapore has a strong workforce ranked among the world's best. The country topped the 2019 Global Talent Competitiveness Index in Asia-Pacific, ranking second globally after Switzerland, and before the United States, which was ranked third.

In addition, Singapore is an ideal springboard into 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 China's growth engine, SEA is a breeding ground of opportunities for businesses. Add Singapore's top talent into the equation, and companies are set for scale and success.

[The first section](#) 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 our [second section](#) if you want to read specifically about tech talent.

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*



Locking Down Your First Key Hires In Singapore

Now that you have a solid business expansion plan and are ready to launch in Singapore, a key stumbling block could be hiring suitable talent. Are the prospective talents 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 city-state's manpower scene.¹

- Size of labour force - 3.7 million
- Employment rate (age 25 - 64) - 80.3%
- % of workforce with tertiary education - 56%
- PMETs as % of workforce - 57%

A SNAPSHOT OF OUR EDUCATION ECOSYSTEM

The Singapore Government invests significantly in education. In 2018, the budget allocated for education was sustained at S\$12.8 billion (US\$9.47 billion), the third highest expenditure after defence and infrastructure. 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 post-secondary and tertiary education institutes include:

- 6 Local universities
- 5 Polytechnics
- 3 Institutes of Technical Education (ITEs)

Singapore's Universities

- [National University of Singapore \(NUS\)](#): NUS is a comprehensive and research-intensive 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 partner universities – and Roots & Wings, a life skills programme that equips students for the challenges in a fast-paced environment.
- [Nanyang Technological University \(NTU\)](#): A research-intensive university, 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 and research-intensive university, with six schools offering programmes in accountancy, business management, economics, information systems, law and social sciences. Its pedagogy features an interactive, collaborative and project-based approach to learning. It also

¹ Ministry of Manpower, Labour Force in Singapore Advance Release 2018. Available at: <https://www.mom.gov.sg/newsroom/press-releases/2018/1129-labour-force-in-singapore-advance-release-2018>

offers the SMU-X curriculum, where students take modules that allow them to work on real-world industry problems under the guidance of 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 feature of all of SIT's own applied degrees and allows students to have 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.

Polytechnics

Singapore's polytechnics offers 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)

Offers 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](#)



OUR UNIVERSITIES TOP ASIA'S RANKINGS

As a reflection of the quality of our education system, two of our local universities – the National University of Singapore (NUS) and the Nanyang Technological University (NTU) – are consistently ranked among the top 20 universities in Asia Pacific.

In 2017, there were 18,537 first degree graduates from our six publicly-funded universities, according to the Singapore Department of Statistics' Yearbook of Statistics Singapore, 2018². Engineering sciences typically formed the largest cohort of fresh university graduates³.

QS World University Rankings - 2019: Asia	Location
1. National University of Singapore	Singapore
2. The University of Hong Kong	Hong Kong
3. Nanyang Technical University, Singapore	Singapore
3. Tsinghua University	China
4. Peking University	China
5. Fudan University	China
6. The Hong Kong University of Science and Technology	Hong Kong
7. KAIST- Korea Advanced Institute of Science and Technology	South Korea
8. The China University of Hong Kong	Hong Kong
9. Seoul National University	South Korea

² Department of Statistics Singapore, Education, language spoken and literacy. Available at: <https://www.tablebuilder.singstat.gov.sg/publicfacing/createDataTable.action?refId=15207>

³ Data.gov.sg, Graduates From University First Degree Courses By Type Of Course. Available at: <https://data.gov.sg/dataset/graduates-from-university-first-degree-courses-by-type-of-course>

SALARY OVERVIEW FOR UNIVERSITY GRADUATES

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

Course Duration	Course Cluster	Degree	Abbreviation	Universities conducting the courses	Employment Rate (%)	Median Monthly Gross Starting Salary (SG\$)
4-year	Computing	Bachelor of Computing (Honours)	B.Comp.(H)	NUS	90	4,100
		Bachelor of Science (Information Systems Management)	B.Sc.(ISM.)	SMU	91.3	4,000
		Bachelor of Engineering (Civil Engineering)	B.Eng.(Civil)	NUS, NTU	94.2	3,400
		Bachelor of Engineering (Computer Science)	B.Eng.(Comp.Sc.)	NTU	86.7	3,850
		Bachelor of Engineering (Computer Engineering)	B.Eng.(Comp. Eng.)	NUS, NTU	85.7	3,744
		Bachelor of Engineering (Electrical Engineering); Bachelor of Engineering (Electrical & Electronic E	B.Eng.(EEE)	NUS, NTU	85.4	3,600
		Bachelor of Engineering (Environmental Engineering)	B.Eng.(Enviro)	NUS, NTU	68.8	3,375
		Bachelor of Engineering (Industrial And Systems Engineering)	B.Eng.(ISE)	NUS	89.9	3,875
		Bachelor of Engineering (Information Engineering and Media)	B.Eng.(IEM)	NTU	78.7	3,700
		Bachelor of Engineering (Materials Engineering)	B.Eng.(Matl. Eng.)	NTU	75.6	3,375
Bachelor of Engineering (Materials Science & Engineering)	B.Eng. (Matl.SC. & Eng.)	NUS	86	3,388		

	Bachelor of Engineering (Mechanical Engineering)	B.Eng.(Mech.)	NUS, NTU	77.4	3,450
Humanities, Social Sciences and Others	Bachelor of Arts (Chinese) (Honours)	B.A.Chinese (H)	NTU	67.7	3,300
	Bachelor of Arts (Economics) (Honours)	B.A.Econs (H)	NTU	75.5	3,240
	Bachelor of Arts (English) (Honours)	B.A.English (H)	NTU	50.8	3,000
	Bachelor of Arts (Honours)	B.A.(H)	NUS	66.7	3,360
	Bachelor of Arts (History) (Honours)	B.A.Hist (H)	NTU	68.4	3,200
	Bachelor of Arts (Linguistics and Multilingual Studies) (Honours)	B.A.LMS. (H)	NTU	60	3,100
	Bachelor of Arts (Psychology) (Honours)	B.A.Psych (H)	NTU	59.2	3,200
	Bachelor of Arts (Public Policy and Global Affairs) (Honours)	B.A.PPGA (H)	NTU	66.7	3,395
	Bachelor of Arts (Sociology) (Honours)	B.A.Soci (H)	NTU	62.1	3,228
	Bachelor of Communication Studies (Honours)	B.Comm.Studies (H)	NTU	62.2	3,000
	Bachelor of Fine Arts (Arts, Design & Media)	B.F.A.	NTU	54	2,800
	Bachelor of Science (Project & Facilities Management)	B.Sc.(Proj & FM)	NUS	81.7	3,000
	Bachelor of Science (Real Estate)	B.Sc.(RE)	NTU	88.7	3,000
	Bachelor of Science (Economics)	B.Sc.(Econ.)	SMU	82.6	3,700
	Bachelor of Social Sciences (Honours); Bachelor of Social Sciences	B.Soc.Sci. (H) /B.Soc.Sc.	NUS, SMU	75.2	3,300
Bachelor of Sports Science and Management	B.Sports.Sci. & Mgmt	NTU	48.6	3,450	
Science	Bachelor of Science (Physics / Applied Physics)	B.Sc.Phys.	NTU	61.8	3,300

		Bachelor of Science (Biological Sciences) (Honours)	B.Sc.BS (H)	NTU	62.6	3,200
		Bachelor of Science (Business Analytics)	B.Sc.BA	NUS	97.6	4,000
		Bachelor of Science (Chemistry & Biological Chemistry) (Honours)	B.Sc.Chem /Bio Chem (H)	NTU	51.1	3,100
		Bachelor of Science (Honours)	B.Sc.(H)	NUS	69.3	3,300
		Bachelor of Science (Mathematical Sciences)	B.Sc.Math Sci	NTU	79.5	3,500
		Bachelor of Science (Mathematics & Economics)	B.Sc.(Maec)	NTU	83.1	3,400
		Bachelor of Science (Nursing) (Honours)	B.Sc.(Nursing) (H)	NUS	89.8	3,500
	Others	Bachelor of Arts (Education) / Bachelor of Arts with Diploma in Education	B.A.(Ed.)	NTU	100	3,600
		Bachelor of Dental Surgery	B.D.S.	NUS	100	4,050
		Bachelor of Science (Education) / Bachelor of Science with Diploma in Education	B.Sc.(Ed.)	NTU	100	3,701
3-year	Business	Bachelor of Accountancy	B.Acc (3 Yr)	NTU	94.5	3,000
		Bachelor of Business Administration (Accountancy)	B.B.A.(Acc.) (3 Yr)	NUS	94.4	3,025
		Bachelor of Business Administration; Bachelor of Business	B.B.A; B.Bus. (3 Yr)	NUS, NTU	81.8	3,380
	Humanities, Social Sciences and Others	Bachelor of Arts	B.A. (3 Yr)	NUS	61.9	3,000
	Science	Bachelor of Science	B.Sc. (3 Yr)	NUS	54.5	3,082
		Bachelor of Science (Nursing)	B.Sc.(Nursing) (3 Yr)	NUS	97.4	3,400

Source: [MOM](#)



TRAINING YOUR EMPLOYEES

Singapore offers broad training initiatives that help workers pick up new skills to better adapt to future needs. Below are some initiatives that companies can tap on to meet their employees' training needs.

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. To find out more on how SkillsFuture can benefit your company, click [here](#).

Adapt and Grow

The [Adapt and Grow](#) initiative was launched by Workforce Singapore (WSG) in 2016 to help the workforce adapt to changes in the manpower landscape and prepare them to transit into new job roles in growth sectors. Under this initiative, Singaporeans can tap on specific programmes in their employment journey to obtain the necessary knowledge, skills and competencies to take on new jobs in growth sectors. To find out how companies can tap on Adapt & Grow initiatives, click [here](#).

Manpower Policies Employers Must Know

Now that you are ready to build your team, here's a broad overview of the legal considerations.

EMPLOYMENT ACT

The Employment Act is Singapore's main labour law. It provides for the basic terms and working conditions for all types of employees, with some exceptions. Please refer to this [link](#) for more information on the Employment Act. More information on policies on leave, public holidays, hours of work, overtime and part-time employment can be found [here](#).

WORK VISAS IN SINGAPORE

All foreigners who intend to work in Singapore must have a valid pass (commonly known as a work visa) before they start work. Employers should recognise which pass is suitable, if their employees are eligible, and how to apply. For more information, please read [here](#).

Passes	Purpose
Work Permit	For semi-skilled foreign workers in the construction, manufacturing, marine, process or services sector
S Pass	For mid-level skilled staff with a minimum salary value of at least S\$2,300 a month
Employment Pass	For managerial, executive or specialised workers with a minimum salary value of at least S\$3,600 a month
EntrePass	For eligible foreign entrepreneurs wanting to start and operate a new business in Singapore

What is the 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, the DRC for the marine shipyard sector's work permit holders is 77.8 per cent. This means up to 77.8 per cent of a marine company's total workforce may consist of S Pass and work permit holders. To calculate the DRC, check out this handy [Foreign Worker Quota Calculator](#) to find out how the ratios affect your hiring decisions.

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. Please refer to this [link](#) for more information on the Fair Consideration Framework.

For more information, please read [here](#).



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 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), the National Trades Union Congress (NTUC) and Singapore National Employers Federation (SNEF).

It is a key competitive advantage for Singapore and has helped boost Singapore's economic competitiveness, promoted harmonious labour-management relations and contributed to Singapore's overall progress. The tripartite committees and initiatives provide guidelines and recommendations on issues such as wages, fair employment and employing older workers. Please refer to this [link](#) for more information about Tripartism in Singapore.

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. More information on Tripartite Standards can be found [here](#).

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 strengthen the Singaporean core in the workforce. It sets out clear expectations for companies to consider Singaporeans fairly for job opportunities. The FCF applies to all companies in Singapore and all companies must comply with the [Tripartite Guidelines on Fair Employment Practices](#) and have fair employment practices that are open, merit-based and non-discriminatory. Learn more on FCF [here](#).

*Discovering
Tech Talent
In Singapore*

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Where The Tech Talent Are

From a port city, the island-state has transformed into a prosperous technology hub, or as former Hewlett Packard Enterprise CEO Meg Whitman coined it - a "[miniature Silicon Valley](#)" in the heart of Southeast Asia.

Today, 80 of the top 100 tech firms in the world, including the likes of Google, Facebook and Alibaba, have a presence in Singapore. The city-state is also home to unicorns and fast-growing startups such as classifieds marketplace Carousell and Indonesian ride-sharing company Go-Jek.

In Singapore, [Facebook](#) intends to open their first S\$1.38 billion (US\$1 billion) Asian data centre by 2020, and [Google](#) is on to their third data centre for their next billion users. Singapore-based unicorn [Grab](#), a ride-hailing app, food delivery service and cashless payment solution provider, has operations across eight countries and 209 cities in Southeast Asia alone.

All these developments translate to rising demand for tech talent in Singapore. The country is expected to employ more than 210,000 Infocomm Media (ICM) professionals by 2020.

Singapore remains an attractive location for companies looking to establish local and regional hubs. According to a 2019 salary survey by professional recruitment consultancy Robert Walters, Singapore saw active recruitment for tech professionals across all sectors. Government investment in technology and the local startup ecosystem continued to fuel the growth of startups which, in turn, encouraged established firms and organisations to accelerate their digital transformation programmes. Companies are exploring emerging technologies such as artificial intelligence and machine learning, and are looking for data scientists and architects to manage their data.

Source: [Robert Walters](#)

WHY GLOBAL TALENTS COME HERE

Job opportunities

The demand for ICM professionals in Singapore is growing rapidly. A 2019 report by Glassdoor stated that there were more than 5,000 tech-related positions available in Singapore as of November 2018. Some of the biggest Silicon Valley giants including Amazon, Apple and Dell are hiring here.

Beyond sales, marketing and business development functions, tech companies are also increasingly looking for software developers, data analysts and systems engineers.

Top Jobs Open In Singapore's Tech Sector

Source: [Glassdoor Economic Research](#) .

Based on unique online job postings as of November 10, 2018.

1. Software engineer
2. Project Manager
3. Solutions Architect
4. Sales Manager
5. Account Executive
6. Marketing Manager
7. Systems Engineer
8. Data Scientist
9. Business Development Manager
10. Programme Manager

An ecosystem of top tech firms

According to a 2018 report by real estate services and investment management company Colliers International, Singapore is the second most popular destination for technology firms wanting to establish and expand their operations in Asia. The Colliers International report attributed this largely to the Republic's strong talent pool, low personal tax rate, safety and living quality, and strategic position as a well-connected financial and communications hub for Southeast Asia and Asia-Pacific operations.

Separately, a 2018 study by real estate advisory firm Jones Lang LaSalle also ranked Singapore as the top foreign investment destination for Chinese tech giants Alibaba, Baidu and Tencent.

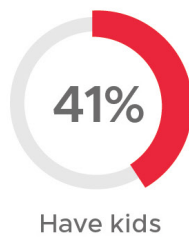
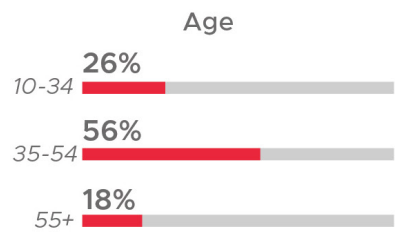
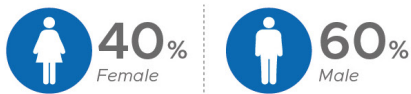
Singapore is the best for expats

For the fourth year running, Singapore topped the Expat Explorer Survey in 2018 to emerge as the best place in the world for expats to move to.

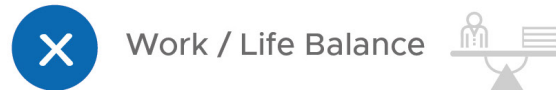
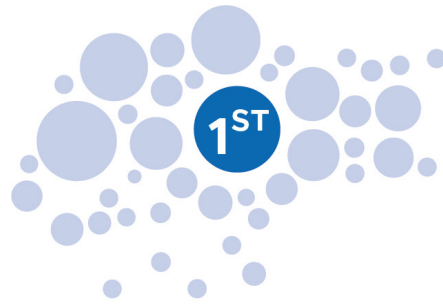
The global survey conducted by HSBC surveyed 22,318 expats, including 524 residing in Singapore, on their experiences, work, and family life.

Expats in Singapore

Expat Explorer Survey 2018 | Based on 524 interviews



Overall Country Ranking

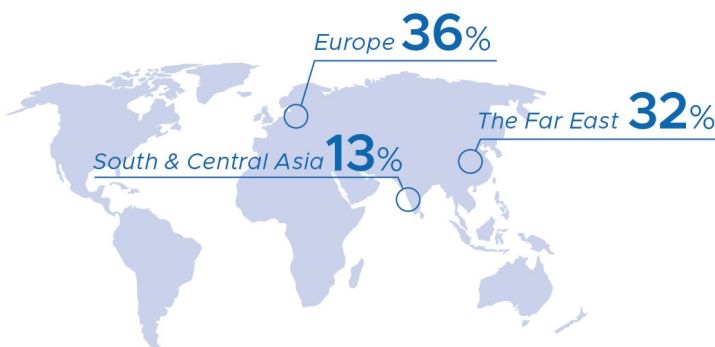


Employment Status



■ Student ■ Employed ■ Unemployed ■ Retired ■ Other

Top Regions of Origin



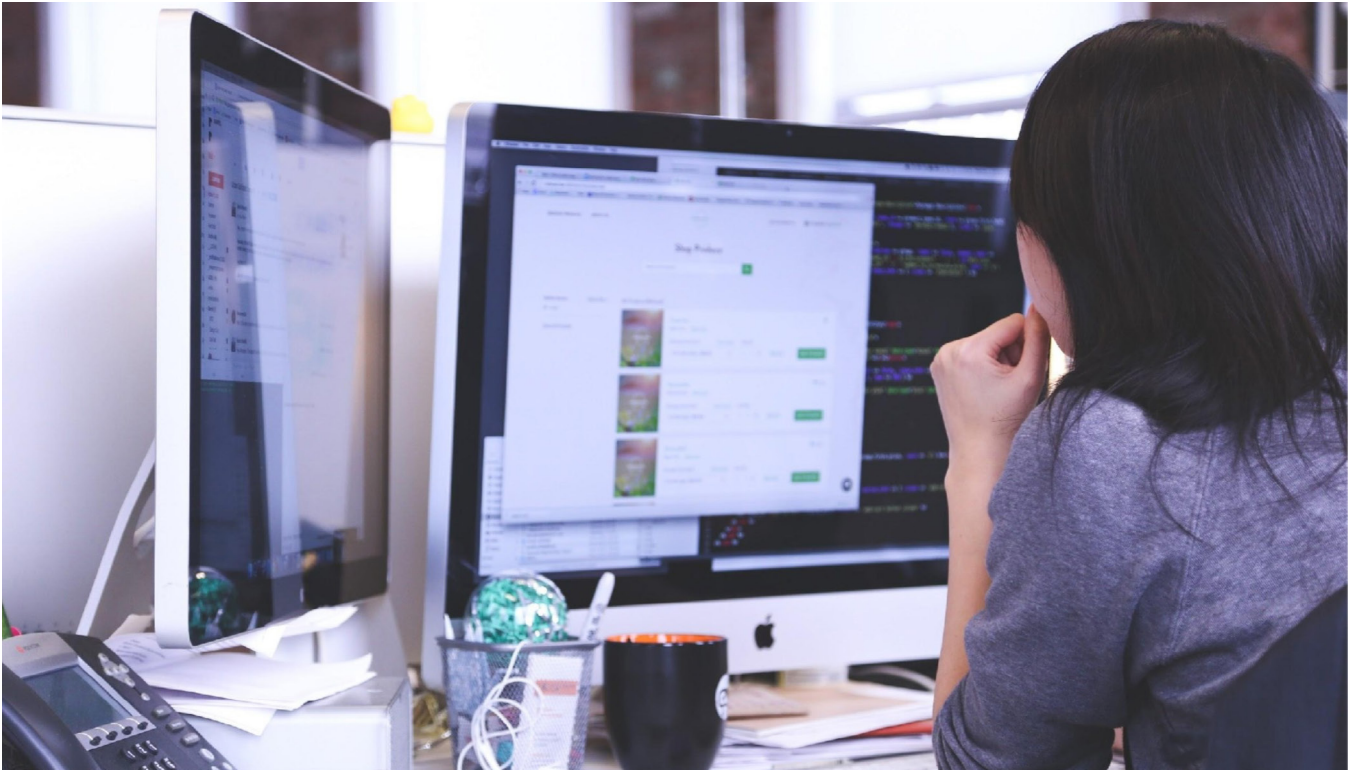
Top 3 Reasons for Moving Here



HOW TO REACH TECH TALENTS IN SINGAPORE

The rise of tech means more job channels dedicated to tech. Here are some tech-dedicated recruitment channels your company can tap to reach these talent.

<p>Global agencies with a tech focus</p>	<ul style="list-style-type: none"> • Morgan McKinley: The professional services recruitment consultancy connects specialist talent with employers across 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.
<p>International job portals</p>	<ul style="list-style-type: none"> • 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.com: Indeed has over 200 million unique visitors every month and provides free access to search for jobs, post resumes, and research companies.
<p>Job portals with an Asia focus</p>	<ul style="list-style-type: none"> • JobStreet: Founded in Malaysia in 1997, it is one of Asia's leading employment marketplace and the top job portal in Singapore. The platform hosts 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.
<p>Boutique agencies/ startups you might want to know</p>	<ul style="list-style-type: none"> • Wantedly: The platform is aimed at allowing people and companies to meet 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.



TECH TALENT AND THEIR SALARIES

Starting salaries of tech-ready graduates

For your convenience, we have put together the starting salaries of all tertiary graduates relevant to tech.

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 ICM.

Course Duration	Course Cluster	Degree	Abbreviation	Universities conducting the courses	Employment Rate (%)	Median Monthly Gross Starting Salary (SG\$)
4-year University graduates	Computing	Bachelor of Computing (Honours)	B.Comp.(H)	NUS	90	4,100
		Bachelor of Science (Information Systems Management)	B.Sc.(ISM.)	SMU	91.3	4,000
	Engineering	Bachelor of Engineering (Computer Science)	B.Eng.(Comp.Sc.)	NTU	86.7	3,850

		Bachelor of Engineering (Computer Engineering)	B.Eng.(Comp. Eng.)	NUS, NTU	85.7	3,744
		Bachelor of Engineering (Industrial And Systems Engineering)	B.Eng.(ISE)	NUS	89.9	3,875
		Bachelor of Engineering (Information Engineering and Media)	B.Eng.(IEM)	NTU	78.7	3,700
Fresh Polytechnic graduates	Built Environment, Engineering & Maritime	Business Process & Systems Engineering; Industrial and Operations Management	Ind. Ops. Mgmt	RP, TP	54.9	2,100
		Computer Engineering; Electronics; Electronic & Computer Engineering; Electronics; Computer & Commun	Comp. Elect.	NYP, NP, TP	53.6	2,200
		Digital & Precision Engineering	Dig. & Precision Eng.	NYP	85.1	2,200
		Multimedia & InfoComm Technology; Telematics & Media Technology	Media. Tech.	NYP	50.7	2,200
	Information & Digital Technologies	Business Applications; Business Information Systems; Business Information Technology	Bus. IT.	RP, SP	41.7	2,155
		Information Technology	Info. Tech.	NYP, NP, RP, SP, TP	54.5	2,200
Post-national service Polytechnic graduates	Information & Digital Technologies	Information Technology	Info. Tech.	NYP, NP, RP, SP, TP	63.4	2,450

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](#)

How much does it cost to build a tech team in Singapore?

To help you estimate the hiring costs, we have put together some salary information from recruitment firms the likes of Robert Walters and Morgan McKinley.

The first table looks at the salary of tech and transformation roles within commerce, based on a [2019 salary survey of Greater China & Southeast Asia](#) by Robert Walters.

The second and third tables look at per annum salaries for IT product and engineering roles within technology, telecommunication, fintech, banking and financial services, based on [Morgan McKinley's 2019 Singapore Salary Guide](#).

Tech & Transformation Roles, Commerce

Source: [Robert Walters](#)

Role	Permanent		Contract	
	Salary per annum S(\$)		Salary per month S(\$)	
	2018	2019	2018	2019
Management				
Chief Information Director	300-600k	300-600k	25-40k	25-40k
IT Director	150-300k	150-300k	14-25k	14-25k
Projects and Change				
Program Manager	180-280k	180-280k	15-25k	15-25k
Infrastructure Project Manager	80-200k	80-200k	8-18k	8-18k
Applications Project Manager	80-200k	80-200k	8-18k	8-18k
Service Delivery Manager	100-170k	100-170k	10-16k	10-16k
Business Analyst	65-150k	65-150k	6-15k	6-15k
Infrastructure				
Head of Infrastructure	150-250k	150-250k	15-20k	15-20k
IT Manager	96-180k	96-180k	9-15k	9-15k
Technical Lead	90-170k	90-170k	10-15k	10-15k
Database Administrator	70-220k	70-220k	7-16k	7-16k
Solutions Architect	120-220k	120-220k	10-15k	10-15k
Cloud Engineer	70-150k	70-150k	8-12k	8-12k
Network/Systems Manager	90-170k	90-170k	9-13k	9-13k
Network/Systems Engineer	65-150k	70-160k	6-11k	6-11k
Systems Admin	65-150k	70-160k	6-11k	6-11k
Help Desk	65-150k	65-150k	6-11k	6-11k
Applications and Development				
Chief Technology Officer	180-450k	180-450k	15-38k	15-38k
VP Engineering	180-220k	180-220k	15-18k	15-18k
Solutions Architect	144-250k	144-250k	12-25k	12-25k
Software Engineer	80-120k	100-140k	5-12k	7-15k
Development Manager	100-200k	100-200k	10-17k	10-17k
Developer	70-150k	80-160k	5-12k	7-15k
Application Support Analyst	60-140k	70-150k	5-12k	5.5-12.5k
Systems Analyst/Tester	70-130k	80-140k	5.5-11k	6.5-12k

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

Source: [Morgan McKinley](#)

IT Product & Engineering Salaries in Technology, Telecommunication and Fintech	Specialist	Senior Specialist	Manager/ Senior Manager	VP/ Director & Above
Software Engineering, Front End	60k - 78k	78k - 126k	126k - 168k	160k+
Software Engineering, Back End	80k - 95k	95k - 114k	114k - 160k	160k+
Software Engineering, Full Stack	80k - 95k	95k - 114k	114k - 160k	160k+
Mobile Engineering (Android/iOS)	60k - 75k	80k - 100k	100k - 140k	150k+
Quality Assurance/Testing	60k - 80k	80k - 120k	120k - 168k	168k+
UI/UX	50k - 80k	90k - 140k	120k - 180k	180k+
Product Management	60k - 90k	90k - 140k	120k - 200k	200k+
Business Intelligence/ Data Engineering	40k - 90k	90k - 170k	140k - 240k	240k+
Data Science/Artificial Intelligence	40k - 90k	90k - 170k	140k - 240k	240k+

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

Source: [Morgan McKinley](#)

IT Product & Engineering Salaries in Banking & Financial Services	Analyst/ Senior Analyst	AVP	VP	Director/ Managing Director
Software Engineering, Front End	40k - 85k	85k - 150k	140k - 240k	240k+
Software Engineering, Back End	40k - 90k	90k - 170k	140k - 240k	240k+
Software Engineering, Full Stack	40k - 90k	90k - 170k	140k - 240k	240k+
Quality Assurance/Testing	40k - 90k	90k - 170k	140k - 240k	240k+
UI/UX	40k - 85k	85k - 150k	140k - 240k	240k+
Business Intelligence/ Data Engineering	40k - 90k	90k - 170k	140k - 240k	240k+
Data Science/Artificial Intelligence	40k - 90k	90k - 170k	140k - 240k	240k+

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. Read on for some examples of these partnerships!

TOP TECH COMPANIES TRAIN TALENT IN SINGAPORE

Google

In 2014, Google launched a Squared Data and Analytics Programme with IMDA to train young professionals keen to enter the data and analytics sector. Google is now scaling the programme further by partnering with the Singapore Management University to increase the talent pool of data analysts.

NVIDIA

EDB-NVIDIA Future Talents programme will provide 30 postgraduate scholarships in AI over the next five years (until 2022) where students will receive mentorship by American tech company NVIDIA and work with companies on industry-specific problem statements. Temasek Polytechnic and NVIDIA have set up a technology centre to give students hands-on experience in industry AI projects.

RSA x IBM Security Operations Centre

Temasek Polytechnic has collaborated with cybersecurity firm RSA and tech giant IBM separately to provide knowledge and skills training to staff and students to equip them with the most advanced IT security and analysis capabilities.

Accenture

Multinational consulting firm Accenture opened up a one-year Emerging Technologist Development Programme (ETDP) to polytechnic graduates to train up software engineers.

IMMERSION PROGRAMMES PROVIDED BY COMPANIES

ThoughtWorks

The new ThoughtWorks Immersion Programme supported by the EDB is a talent development programme that provides intensive, hands-on training in agile software development. Targeted at university graduates, entry-level software developers, and mid-career switchers, this initiative is designed to give individuals who have a passion for technology the opportunity to build successful, long-term careers in tech and software development, even if they do not have the extensive experience and/or a background in computer science. ThoughtWorks also hopes to encourage more women to look at building careers in technology through this immersion programme.

Mentorship and coaching programme with placement:

- Agile Software Development and Best Engineering Practices

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:

- Web Development Immersive (WDI)
- User Experience Design Immersive (UXDI)
- Digital Marketing Immersive (DMI)
- Data Science Immersive (DSI)

JOINT GOVERNMENT INITIATIVE TO DEVELOP A SKILLED ICM WORKFORCE

TechSkills Accelerator (TeSA) is an initiative driven by Singapore's Infocomm Media Development Authority in partnership with other government agencies, industry partners and hiring employers.

Under this initiative, training programmes are available to help fresh graduates or mid-level professionals in the ICM or STEM disciplines deepen tech skills. For a list of these training programmes, click [here](#).

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 government 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.

Looking Into The Future



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 Asia, and find out how Singapore is dealing with these issues.

First of all, Asia is 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 26.8 per cent in 2017, from 14.3 per cent in 2006. The potential for older workers to keep contributing is huge, but it will require adjustments, not just from the government but also employers, to make workplaces and job scopes more age-friendly.⁵

Gender diversity is another topic rapidly gaining prominence in Asia.

[McKinsey's 2018 report The Power of Parity: Advancing Women's Equality in Southeast Asia](#) shows the Asia Pacific 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.

In a [contribution](#) published by Singapore's Channel NewsAsia in Jan 2019, Dell's Head of Diversity & Inclusion in the Asia Pacific, China and Japan also noted that female representation decreases up the corporate ladder specially in the tech industry.

In Singapore, the percentage of women in tech has hovered around 30 per cent since 2000, according to the Info-communications Media Development Authority. 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 conference [Women in Tech](#), and advocacy groups [Girls in Tech](#) and [Lean In](#). More companies are also putting in place policies that help women balance their work and family commitments.

Here are some women in the tech sector making waves in Singapore.

Jenny Lee, Managing Partner, GGV Capital

The Singaporean based in Shanghai has gained the reputation of being an investor with a Midas touch, where everything she touches seemingly turns to gold. She has led GGV's investments in hiSoft, 21Vianet, SinoSun and YY – all of which have successfully listed on the stock exchange. When Lee fully exited social media firm YY last year, the deal had brought in a 15-times return. She was also involved in GGV's deal with Xiaomi, which is one of the top five smartphone manufacturers in the world today.

⁵ [National Population and Talent Division](#) and the [Ministry of Communications and Information](#).

Ankiti Bose, Co-founder, Zilingo

Singapore-based Zilingo is Southeast Asia's largest fashion and lifestyle marketplace, providing buyers with access to millions of products, and free-of-cost access to analytics, speedy logistics and secure payments to merchants. The Indian entrepreneur, together with her business partner Dhruv Kapoor, raised US\$226 million (S\$307.1 million) Series D funding in 2019. Since they founded Zilingo in 2015, they have grown its revenue by 10 times. The number of merchants on its platform has swelled from 1,500 to 10,000.

Gillian Tee, Co-founder, Homage

Homage is an in-home caregiving solution founded in 2016 that combines care professionals with smart technology to manage and provide on-demand home caregiving to seniors, allowing them to age at home with grace, control and dignity. The Singaporean was intrigued by the way the United States is using technology to improve senior care, and decided to explore a similar model in Singapore. She has received grants from the Ministry of Health and DBS Foundation - a corporate foundation that supports social enterprises - and in 2017 raised S\$1.2million (US\$880,000) in funding.

Alexis Horowitz-Burdick, Founder, Luxola

The American who lives in Singapore founded e-commerce beauty site Luxola in 2011, which went from running out of a Club Street apartment with four staff and stocking only 18 brands to a 125-strong company offering more than 300 brands in 11 countries including Australia, Hong Kong and India. In 2015, French luxury goods conglomerate Moët Hennessy Louis Vuitton SE (LVMH) acquired the Singapore-based business, a deal which industry insiders speculate to be in the tens of millions. She is today the head of LEGO Ventures at LEGO Group.

Conclusion



Reach Out To EDB's Partners

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.

To read the latest trends and insights about the Asian business landscape, sign up [here](#).

To connect with EDB's curated network of partners through our online service Connections Concierge, click [here](#).

*Annex:
Other Useful
Resources*

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GOVERNMENT-SUPPORTED PROGRAMMES THAT CAN BENEFIT EMPLOYERS INCORPORATED IN SINGAPORE

Scheme under SkillsFuture	Purpose	Benefits to company
Earn and Learn Programme (ELP)	<p>ELP is a work-learn programme that gives fresh graduates from polytechnics and the Institute of Technical Education (ITE) a head start in careers related to their discipline of study.</p> <p>Participating employers can recruit local fresh talent, and prepare them to take up suitable job roles.</p>	<ol style="list-style-type: none"> 1. Be able to groom and retain suitable talent with the relevant skills and aptitude to meet the needs of the company. 2. Receive a grant of up to S\$15,000 per individual placed in the ELP to defray the costs of developing and providing structured on-job-training and to encourage them to set out career progression pathways.

Schemes under Adapt and Grow	Purpose	Benefits to company
Career Support Programme (CSP)	<p>CSP is a salary support programme to encourage employers to hire eligible Singapore Citizen Professionals, Managers, Executives and Technicians (PMETs).</p>	<p>Receive salary support of up to S\$42,000 per employee, for up to 18 months.</p>
Career Trial	<p>The Career Trial allows employers to assess a jobseeker's fit via a cost-free short-term work stint before offering employment.</p>	<ol style="list-style-type: none"> 1. Receive 30% of monthly salary support for up to 6 months, capped at S\$5,400 per hire, for employers who hire unemployed Singaporean Citizens who have been actively looking for jobs for 6 months or more. 2. Get training allowance for jobseekers from S\$7.50 - S\$15/hr, up to 3 months. Eligible Singapore Citizen jobseekers will qualify for retention incentives if they stay in the same job for at least 3 consecutive months.

<p>Professional Conversion Programme (PCP)</p>	<p>PCPs are career conversion programmes targeted at Professionals, Managers, Executives and Technicians (PMETs), including mid-career switchers, to undergo skills conversion and move 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.</p>	<ol style="list-style-type: none"> 1. Facilitate recruitment of mid-career switchers to meet employers' manpower needs 2. Leverage structured industry-recognised training 3. Minimise redundancies and reskill experienced employees to take on new job roles 4. Tap on Government funding through course fee grant and salary support / training allowance <ol style="list-style-type: none"> a. Support of up to 90 per cent of monthly salary capped at S\$6,000/month b. Support of up to 90 per cent of course fee funding.
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For more information on meeting your hiring and training needs, refer to this [link](#).

MORE ABOUT WORK PASSES

For employees

Schemes	Purpose	Details	Links
Work Permit	For semi-skilled foreign workers in the construction, manufacturing, marine, process or services sector.	Please refer to this link for more information on Work Permits.	<ul style="list-style-type: none"> • 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 to this link for more information on S Pass.	<ul style="list-style-type: none"> • Guide on calculating the quota balance • Foreign Worker Quota Calculator • Self Assessment Tool
Employment Pass	For managerial, executive or specialised workers	Please refer to this link for more information on Employment Passes.	<ul style="list-style-type: none"> • Self Assessment Tool

For entrepreneurs

Schemes	Purpose	Details
EntrePass	For eligible foreign entrepreneurs wanting to start and operate a new business in Singapore	Please refer to this link for more information on EntrePass.

For trainees

Schemes	Purpose	Details
Training Employment Pass	For foreign students/professionals undergoing training in Singapore	Please refer to this link for more information on Training Employment Passes.
Training Work Permit	For semi-skilled foreign trainees or students undergoing technical training	Please refer to this link for more information on Training Work Permits.
Work Holiday Pass	For students and graduates aged 18-25 to work and holiday in Singapore	Please refer to this link for more information on Work Holiday Passes.

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Workforce Singapore (WSG)



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You may submit questions or comments via [this link](#), or sign up [here](#) to receive the latest updates on the Asian business landscape.