



# MEDIA RELEASE

# \$72 MILLION BOOST FOR BUILT ENVIRONMENT WORKFORCE DEVELOPMENT AND TRAINING

- Enhancements to the iBuildSG Scholarship and Sponsorship programme to offer training grants and retention incentives

- The iBuildSG Tripartite Committee (TC) will be set up to deepen the ongoing tripartite collaboration in workforce development among industry stakeholders, academia, professional boards, unions and the government

- The iBuildSG Club will be set up in April 2019, to engage and interest youths to take up Built Environment-related courses and nurture them for careers in the sector

**Singapore, 22 January 2019** – The Government has committed \$72 million for workforce development and training for the Built Environment (BE) sector till 2020. This will include enhancements to the iBuildSG Scholarship and Sponsorship programme (formerly known as the Built Environment Scholarship and Sponsorship programme) for the full-time Undergraduate, Diploma and ITE tracks. Recipients can expect structured On-Job-Training (OJT) when they start full-time employment at the sponsoring firm. Beyond their bond period, graduates can look forward to a further training grant of \$3,000 to upgrade their skills and competencies. Those who continue their career in the BE sector for an additional year following their bond period will also receive a retention incentive of \$7,000.

2. In addition, the Building Specialist Sponsorship (BSS) will be enhanced with an additional year of support under the revised 3-year programme to better align with the

part-time NITEC, Higher NITEC and post-ITE development courses. The BSS is a collaboration between BCA and the industry to attract and retain talent at the specialist and supervisor level, e.g. Lift & Escalator specialists.

3. Minister for National Development and Second Minister for Finance, Mr Lawrence Wong announced this at the inaugural iBuildSG Scholarship and Sponsorship Ceremony, held today at the NUS University Cultural Centre. A total of 448 scholarships and sponsorships were awarded by BCA and 108 industry firms during the event.

4. One of the industry firms joining the iBuildSG Scholarship and Sponsorship programme for the first time this year is KKLim & Associates. Managing Director Mr Lim Kok Kim believes in continual improvement of staff. Mr Lim said, "Our belief is that when staff improve and grow, the company will grow together with them. The joint sponsorship offered by BCA certainly gives a boost to people who wish to upgrade but are limited by financial constraints. As an engineering design company, we need technically competent and progressive staff who possess great interest and passion to upgrade themselves."

5. To look into deepening ongoing tripartite collaboration for developing the industry's workforce, BCA will be setting up a standing iBuildSG Tripartite Committee (TC). The TC will focus on talent attraction, retention and building competencies, and will also provide advice and inputs to the Skills Framework for the sector. This framework, which will be developed jointly by BCA, SkillsFuture Singapore and Workforce Singapore, will map out career pathways for identified job roles in the sector, existing and emerging skills and competencies needed to stay relevant. It will also provide guidance on the available training programmes to help them acquire these skills and competencies.

6. BCA will also engage students through the iBuildSG Club for students in secondary schools and tertiary institutions. To be launched in April 2019, the iBuildSG club will introduce students to the BE sector and all that it offers. Its aim would be to attract youths to take up courses which enable them to pursue meaningful careers in the sector. Members will be able to take part in activities such as learning journeys, inter-disciplinary

projects and hands-on workshops/ competitions, as well as visits to places of interest to learn about the transformation in the sector and the important role it plays in building Singapore. Members will be able to stay updated on the latest news about our built environment, club events and activities through the Club's social media platforms.

7. BCA CEO, Mr Hugh Lim said, "Singapore's built environment is in the midst of an exciting transformation and this demands new technology, higher skills and innovation in how we build Singapore. Powering the engine of transformation are talented and committed individuals and this is why we have enhanced our existing programmes and created new touchpoints to reach out to as many individuals as possible. Students are a natural starting point and by reaching out to them at an early stage through the iBuildSG Club, they can be better advised how to prepare themselves to seize new career opportunities in the sector. We also hope that the enhancements made to the iBuildSG Scholarship and Sponsorship programme will continue to attract and retain talent in our sector. We will continue to collaborate closely with the industry to press on with our transformation efforts, through the iBuildSG Tripartite Committee."

### Enclosed

- Annex A iBuildSG Scholars and Sponsored Students 2018: Facts and Figures
- **Annex B –** About the iBuildSG Scholarships and Sponsorships
- Annex C Selected Profiles of Exemplary Scholars and Sponsored Students
- Annex D About the iBuildSG Tripartite Committee
- Annex E About the iBuildSG Club

Issued by the Building and Construction Authority on 22 January 2019

# About BCA

The Building and Construction Authority (BCA) of Singapore champions the development of an excellent built environment for Singapore. BCA's mission is to shape a safe, high quality, sustainable and friendly built environment, as these are four key elements where BCA has a significant influence. In doing so, it aims to differentiate Singapore's built environment from those of other cities and contribute to a better quality of life for everyone in Singapore. Hence, its vision is to have "a future-ready built environment for Singapore". Together with its education arm, the BCA Academy of the Built Environment, BCA works closely with its industry partners to develop skills and expertise that help shape a future-ready built environment for Singapore. For more information, visit www.bca.gov.sg.

### Annex A

### iBuildSG Scholarship and Sponsorship: Facts and Figures

# Table 1: Built Environment Scholars and Sponsored Students 2018 – Overall

Programmes	Total	Male	Female
Undergraduate scholarship recipients	181	120	61
Undergraduate sponsorship recipients	75	38	37
Diploma scholarship recipients	22	17	5
Diploma sponsorship recipients	48	28	20
ITE scholarship recipients	76	59	17
Postgraduate sponsorship recipients (Part-time)	10	8	2
Undergraduate sponsorship recipients (Part-time)	3	2	1
Diploma sponsorship recipients (Part-time)	2	1	1
Grand Total	417*	273	145

### Table 2: Building Specialist Sponsorship

Building Specialist Sponsorship	Total	Male	Female
BSS(Foreman/Supervisor/Specialist development)	28*	26	2
BSS (Crane Operations)	3*	3	0

### Table 3: Industry Sponsors

Industry sponsors	Number
Undergraduate Scholarship / Sponsorship	66
Diploma Scholarship / Sponsorship	17
ITE Scholarship	5
Postgraduate Sponsorship (Part-time)	10
Undergraduate Sponsorship (Part-time)	3
Diploma Sponsorship (Part-time)	2
Building Specialist Sponsorship	19
Total unique number of sponsors	108

Please note: Information in Tables 1, 2 and 3 are accurate as at 21 Jan 2019.

### Annex B

### About the iBuildSG Scholarships and Sponsorships

### Introduction

The iBuildSG Postgraduate / Undergraduate / Diploma / ITE Scholarship/Sponsorship (full-time / part-time) Programme is a partnership among BCA and industry firms to offer young people of high calibre and vision an opportunity to take up the challenge of a career in the built environment (BE) sector. The scholarship/sponsorship programme is tenable for full-time and part-time built environment courses at the local Universities, Polytechnics, ITEs and the BCA Academy.

The Stage 2 Post-Degree / Diploma / ITE Development Programme encourages graduates, scholars and sponsored students to remain in the BE sector upon graduation and completion of their bond. The Stage 2 programme spans 2 years for graduates from the Degree and Diploma programmes and 3 years for ITE graduates, and it involves structured On-Job-Training (OJT) and upgrading / training opportunities. If the scholars and sponsored students remain in the BE sector beyond their bond period, they will receive retention incentives and training grants.

For more information on the programmes, visit www.buildingcareers.gov.sg.

Stage 1:	During undergraduate study		
Scholarship		Sponsorship	
<ul> <li>Minimur</li> </ul>	n S\$18,000 per year per scholar who is a	Minimum S\$10,000 per year per sponsored student who is a	
• •	e Resident with at least a two-year bond with the	Singapore Resident with at least a two-year bond with the sponsoring	
sponsorir		firm	
Stage 2:	After graduation		
Year	Stage 2 programme (2 years)		
1	Sponsoring firm will provide the graduate with a structured On-Job-Training		
2	Sponsoring firm will sponsor the graduate for part-time upgrading course		
Incentiv	/es		
Incentiv	e to sponsor:		
Up to \$1	0,000 per graduate during 2 years bond		
BCA Aca	r <b>ironment Courses</b> I <b>demy (BCAA)</b> Civil Engineering	<ul> <li>Nanyang Technological University (NTU)</li> <li>Civil Engineering</li> <li>Electrical and Electronic Engineering</li> <li>Environmental Engineering</li> </ul>	
	Construction Management (Building)	Mechanical Engineering	
National	University of Singapore (NUS)	Singapore Institute of Technology (SIT)	
	Architecture	Civil Engineering	
• /	Architecture		
• (	Civil Engineering	Sustainable Infrastructure Engineering (Building Services)	
• ( •	Civil Engineering Electrical Engineering	Sustainable Infrastructure Engineering (Building Services)	
• ( •   •	Civil Engineering Electrical Engineering Environmental Engineering		
• ( •   •   •	Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering Project and Facilities Management Real Estate	Sustainable Infrastructure Engineering (Building Services) Singapore University of Technology & Design (SUTD)	
• ( •   •   •	Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering Project and Facilities Management Real Estate	<ul> <li>Sustainable Infrastructure Engineering (Building Services)</li> <li>Singapore University of Technology &amp; Design (SUTD)         <ul> <li>Architecture &amp; Sustainable Design</li> </ul> </li> </ul>	
• ( •   •   •   •   Eligibility • Singapo	Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering Project and Facilities Management Real Estate / orean Citizens and Singaporean Permanent Reside	<ul> <li>Sustainable Infrastructure Engineering (Building Services)</li> <li>Singapore University of Technology &amp; Design (SUTD)         <ul> <li>Architecture &amp; Sustainable Design</li> <li>Engineering Product Development</li> </ul> </li> </ul>	
• ( •   •   •   Eligibility • Singapo (collective	Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering Project and Facilities Management Real Estate / orean Citizens and Singaporean Permanent Reside ely known as Singapore Residents)	<ul> <li>Sustainable Infrastructure Engineering (Building Services)</li> <li>Singapore University of Technology &amp; Design (SUTD)         <ul> <li>Architecture &amp; Sustainable Design</li> <li>Engineering Product Development</li> </ul> </li> </ul>	
• ( •   •   •   • Singapo (collective • 'A' level	Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering Project and Facilities Management Real Estate / prean Citizens and Singaporean Permanent Reside ely known as Singapore Residents) , Polytechnic students and undergraduates	<ul> <li>Sustainable Infrastructure Engineering (Building Services)</li> <li>Singapore University of Technology &amp; Design (SUTD)         <ul> <li>Architecture &amp; Sustainable Design</li> <li>Engineering Product Development</li> </ul> </li> </ul>	
<ul> <li>()</li> <li>(</li></ul>	Civil Engineering Electrical Engineering Environmental Engineering Mechanical Engineering Project and Facilities Management Real Estate / orean Citizens and Singaporean Permanent Reside ely known as Singapore Residents)	<ul> <li>Sustainable Infrastructure Engineering (Building Services)</li> <li>Singapore University of Technology &amp; Design (SUTD)         <ul> <li>Architecture &amp; Sustainable Design</li> <li>Engineering Product Development</li> </ul> </li> </ul>	

Excellent CCA records

#### Diploma Scholarship/Sponsorship (Full-time)

rith at leas ompany	<ul> <li>per year per scholar who is a Singapore Resident st a two-year bond with the sponsoring firm</li> <li>stage 2 programme (2 years)</li> <li>Sponsoring firm will:         <ul> <li>provide the graduate with a structured On</li> </ul> </li> </ul>	S\$7,000 per year per sponsored student who is a Singapore Resider with at least a two-year bond with the sponsoring firm
ompany tage 2: A Year	fter graduation Stage 2 programme (2 years) Sponsoring firm will:	
Year	Stage 2 programme (2 years) Sponsoring firm will:	
	Sponsoring firm will:	
1		
1	<ul> <li>provide the graduate with a structured On</li> </ul>	
	<b>1 1 1 1 1 1 1 1 1 1</b>	n-Job-Training
	<ul> <li>pay the diploma graduate a minimum bas</li> </ul>	sic salary of S\$2,200
	Sponsoring firm will:	
2	- sponsor the graduate for part-time Specialist / Advanced Diploma course	
	<ul> <li>pay the diploma graduate a minimum bas</li> </ul>	sic salary of S\$2,400
Incentive	)S	
Incentive	to sponsor:	
Up to \$10	),000 per graduate during 2 years bond	
Incentive	to graduate:	
Up to \$	\$3,000 training grant (unlocked for use upon comple	tion of their bond) within 3 years of completion of bond or Stage 2

• \$7,000 retention incentive 1 year after completion of bond or Stage 2 programme

#### **Built Environment Courses**

Stage 1	Stage 2:
Full-time Diploma courses	Part-time Specialist / Advanced Diploma courses
BCA Academy	BCA Academy
Architecture (Technology)	Specialist Diploma in Architectural Technology
Construction Engineering	Specialist Diploma in Building Cost Management
<ul> <li>Digital Engineering (formerly Construction Information Technology)</li> </ul>	<ul> <li>Specialist Diploma in Building Information Modelling (BIM)</li> </ul>
<ul> <li>Design (Interior and Landscape)</li> </ul>	Specialist Diploma in Construction Management
<ul> <li>Electrical Engineering &amp; Clean Energy</li> </ul>	Specialist Diploma in Construction Productivity
<ul> <li>Facilities Management</li> </ul>	Specialist Diploma in Design for Manufacturing &
<ul> <li>Mechanical Engineering (Green Building Technology)</li> </ul>	Assembly (DfMA)
Quantity Surveying	Specialist Diploma in Facility & Energy Management
Nanyang Polytechnic	Specialist Diploma in Interior & Landscape Design
<ul> <li>Electrical Engineering with Eco-Design</li> </ul>	Specialist Diploma in Lean Construction
<ul> <li>Spatial Design (formerly Space and Interior Design)</li> </ul>	<ul> <li>Specialist Diploma in M &amp; E Coordination</li> </ul>
Architecture (formerly Sustainable Architectural Design)	Specialist Diploma in MEP Modularisation
	<ul> <li>Specialist Diploma in Underground Construction</li> </ul>
Ngee Ann Polytechnic	<ul> <li>Specialist Diploma in Virtual Design &amp; Construction</li> </ul>
Clean Energy Management	(VDC)
Electrical Engineering	
<ul> <li>Environmental &amp; Water Technology</li> </ul>	Ngee Ann Polytechnic
	<ul> <li>Diploma (Conversion) in Facility Management</li> </ul>

Renewable Energy Engineering)	Specialist Diploma in Civil Engineering (Productivity & Technology)
Renewable Energy Engineering)	
Singapore Polytechnic	<ul><li>Technology)</li><li>Specialist Diploma in Energy Efficiency and</li></ul>
Architecture	Management
Civil Engineering with Business	Specialist Diploma in Building Information Modelling
Electrical & Electronic Engineering	(BIM) Management
Energy Systems and Management	Advanced Diploma in Power System Engineering
Facilities Management (formerly Hotel & Leisure	Specialist Diploma in Digital Technologies for a Smart
Facilities Management)	City
<ul> <li>Integrated Events &amp; Project Management</li> </ul>	
Interior Design	Temasek Polytechnic
Landscape Architecture	<ul> <li>Specialist Diploma in Energy Management &amp;</li> </ul>
Mechanical Engineering	Sustainable Design
emasek Polytechnic	
Clean Energy	
Environment Design	
Green Building & Sustainability	
Integrated Facility Management	
Interior Architecture & Design	

(collectively known as Singapore Residents)
'O' level / ITE school leavers and polytechnic students taking full-time built environment diploma courses
Outstanding academic results and excellent CCA records

ITE Scholarship

#### Two stages: During ITE study and Post-ITE development (after graduation)

#### Stage 1: During ITE study

#### Scholarship

• S\$7,000 per year per scholar who is a Singapore Resident with at least a two-year bond with the sponsoring firm company Stage 2: After graduation

Year	Stage 2 programme (3 years)	
	Sponsoring firm will:	
1	<ul> <li>provide the graduate with a structured On-Job-Training</li> </ul>	
	<ul> <li>pay the ITE graduate a minimum basic salary of S\$1,850</li> </ul>	
	Sponsoring firm will:	
2	<ul> <li>sponsor the graduate for BCA-approved part-time training course</li> </ul>	
	<ul> <li>pay the ITE graduate a minimum basic salary of S\$2,050</li> </ul>	
2 (antional	Sponsoring firm will:	
3 (optional	<ul> <li>sponsor the graduate for BCA-approved part-time training course</li> </ul>	
year)	- pay the ITE graduate a minimum basic salary of S\$2,350	

Incentives

Incentive to sponsor:

Up to \$15,000 per graduate during the 3-year period

#### Incentive to graduate:

- Up to \$3,000 training grant (unlocked for use upon completion of their bond) within 3 years of completion of bond or Stage 2 programme
- \$7,000 retention incentive 1 year after completion of bond or Stage 2 programme

#### **Built Environment Courses Full-Time ITE Courses** Higher NITEC in Civil & Structural Engineering Design NITEC in Built Environment (Vertical Transportation) . Higher NITEC in Electrical Engineering (previously known as NITEC in Facility Technology (Vertical Transportation) Higher NITEC in Facility Systems Design NITEC in Mechanical Technology Higher NITEC in Facility Management • . NITEC in Architectural Technology (previously known as Higher NITEC in Mechanical Engineering • NITEC in Space Design (Architecture)) Higher NITEC in Architectural Technology (previously NITEC in Interior and Exhibition Design (previously known known as Higher NITEC in Space Design Technology ٠ as NITEC in Space Design (Interior & Exhibition)) NITEC in Electrical Technology (Power & Control) NITEC in Built Environment (Mechanical & Electrical Services) (restructured from NITEC in Facility Technology (Air-Conditioning & Refrigeration) and NITEC in Facility Technology (Mechanical & Electrical Services))

#### Eligibility

• Singaporean Citizens and Singaporean Permanent Residents

(collectively known as Singapore Residents)

• 'N' level / 'O' level graduates, ITE students in built environment Nitec/Higher Nitec courses

Good CCA records

Postgraduate Sponsorship (Part-time) provides existing built environment professionals with opportunities to upgrade their skills and knowledge by pursuing part-time postgraduate courses at local institutions. Sponsored postgraduate students will have 70% of their course fees subsidised and will serve a one-year bond with the sponsor company.

Built Environment Courses	
<ul> <li>BCA Academy / University of Florida (UOF)</li> <li>Master of International Construction Management with Major in Construction Productivity</li> </ul>	<ul> <li>Singapore Institute of Technology</li> <li>Master of Engineering Technology (Civil Engineering)</li> <li>Master of Engineering Technology (Sustainable)</li> </ul>
<ul> <li>Nanyang Technological University</li> <li>Master of Science (Civil Engineering)</li> <li>Master of Science (Environmental Engineering)</li> <li>Master of Science (International Construction Management)</li> <li>Master of Science (Mechanical Engineering)</li> </ul>	Infrastructure Engineering-Building Services) Singapore University of Social Sciences  Master of Human Capital Management Eligibility
<ul> <li>National University of Singapore</li> <li>Master of Science (Building Performance and Sustainability)</li> <li>Master of Science (Environment Management)</li> <li>Master of Science (Geotechnical Engineering)</li> <li>Master of Science (Integrated Sustainable Design)</li> <li>Master of Science (Civil Engineering)</li> <li>Master of Science (Electrical Engineering)</li> <li>Master of Science (Environmental Engineering)</li> <li>Master of Science (Mechanical Engineering)</li> </ul>	Singapore Citizens and Singapore Permanent Residents* who are applying for the part-time built environment postgraduate courses * Male applicants must have completed or be exempted from full- time National Service

Undergraduate Sponsorship (Part-time) allows sponsoring firm	n to upgrade and retain their high-potential Singaporean employees,	
whom the firms wish to groom to take up higher management and professional roles in the built environment. Sponsored		
undergraduates will have 70% of their course fees subsidised and	d will serve a two-year bond with the sponsoring firm.	
Built Environment Courses		
	National University of Singapore	
BCA Academy / University of Newcastle	Civil Engineering	
Construction Management (Building)	Mechanical Engineering	
BCA Academy / Singapore University of Social Sciences	Singapore University of Social Sciences	
Building and Project Management	Bachelor of Human Resource Management	
BCA Academy / Singapore University of Social Sciences /		
Singapore Polytechnic	Eligibility	
Facilities and Events Management	Singapore Citizens and Singapore Permanent Residents* who are applying for the part-time built environment undergraduate courses	
Nanyang Technological University		
Electrical and Electronic Engineering	* Male applicants must have completed or be exempted from full-	
Mechanical Engineering	time National Service	

Built Environment Courses	
BCA Academy	Republic Polytechnic
Construction Engineering	<ul> <li>International Human Resources Management</li> </ul>
Electrical Engineering & Clean Energy	
Facilities Management	
<ul> <li>Geo-Spatial Information and Technology</li> </ul>	Eligibility
	Singapore Citizens and Singapore Permanent Residents* who are
Ngee Ann Polytechnic	applying for the part-time built environment diploma courses
<ul> <li>Building Services &amp; Fire Safety</li> </ul>	
Electrical	* Male applicants must have completed or be exempted from full-
Mechanical	time National Service
Singapore Polytechnic	
Interior Design	
Mechanical Technology	
Power Engineering	
Measurement & Contract Administration	

### **Building Specialist Sponsorship**

The iBuildSG Building Specialist Sponsorship (BSS) is offered by BCA in collaboration with industry firms, to attract, upgrade and retain Singapore Residents in jobs at the specialist, supervisor and foreman level of higher value-adding trades in the built environment sector.

#### **Building Specialist Sponsorship**

#### BSS(Foreman/Supervisor/Specialist development/ Crane Operations)

Sponsoring firm will pay minimum monthly basic salaries of \$1,850 (first year), \$2,100 (second year) and \$2,300 (third year).

For lift specialists recruited under the Lift & Escalator sector, sponsoring firm will pay minimum monthly gross salaries of \$2,100 (first year), \$2,500 (second year) and \$2,900 (third year).

**Incentive** to employee if the employee meets 75% class attendance for the approved course and attempts all assessments/exams therein for the preceding 1 year of employment and training:

- 1st year: \$6,000 incentive payable in 2 instalments
- 2nd year: \$3,600 incentive payable in 2 instalments
- 3rd year: \$2,400 incentive payable in 2 instalments

**Incentive** to employer if the employer meets all sponsor related obligations to the employee:

- 1st year: \$5,000 incentive at year end
- 2nd year: \$5,000 incentive at year end
- 3rd year: \$5,000 incentive at end of BSS programme

#### Eligibility Foreman/Specialist Development Supervisor/Specialist Development Singapore Resident who is a new entrant or the firms' existing Singapore Resident who is a registered CoreTrade Foreman or possess employee who possesses less than 3 consecutive years of minimum 3 years of relevant experience or firms' existing employees who experience in the built environment sector; and fulfil entry has worked in built environment sector for past 3 years; and fulfil entry requirements for the following programmes: requirements for the following programmes: Plumbing Track: Structural Track: Part-time Nitec in Technology, Facility Technology (Air-National Building Qualification (NBQ) and Conditioning and Refrigeration) Higher National Building Qualification (H.NBQ) offered at the • **BCA Academy** Electrical Track: Part-time Nitec in Technology, Facility Technology Plumbing Track: (Mechanical & Electrical Services) National Building Qualification (NBQ) and Part-time Nitec in Technology, Facility Technology Higher National Building Qualification (H.NBQ) offered at the • (Vertical Transportation) **BCA Academy** • Part-time Nitec in Mechatronics Electrical Track: Part-time Nitec in Technology, Electrical Technology National Building Qualification (NBQ) and (Power & Control) programme Higher National Building Qualification (H.NBQ) offered at the **BCA Academy** Part-time Technical Diploma in Mechanical & Electrical Services Supervision) Part-time Technical Diploma in Vertical Transportation Part-time Diploma in Engineering (Power Engineering)

	Part-time Higher Nitec in Facility Management
	Part-time Higher Nitec in Technology (Mechatronics
	Engineering)
BSS (Crane Operations)	

For 3-year single stage programme

• Singapore Resident who is a new entrant or experienced crane operator who possess valid licence of a particular crane operation type <u>or</u> licence which has expired for more than 5 years

Crane operation course/s offered at the BCA Academy or ATTC/s; <u>and</u> relevant value-adding courses offered at the BCA Academy or ATTC/s

#### Annex C

#### Selected Profiles of Exemplary Scholars and Sponsored students

#### Turning her childhood aspiration into reality



#### Koh Mun Yen, 23 years old

- 2018 BCA-RSP iBuildSG Undergraduate Scholarship
- Pursuing Bachelor Degree in Architecture, Year 4 at National University of Singapore (NUS)

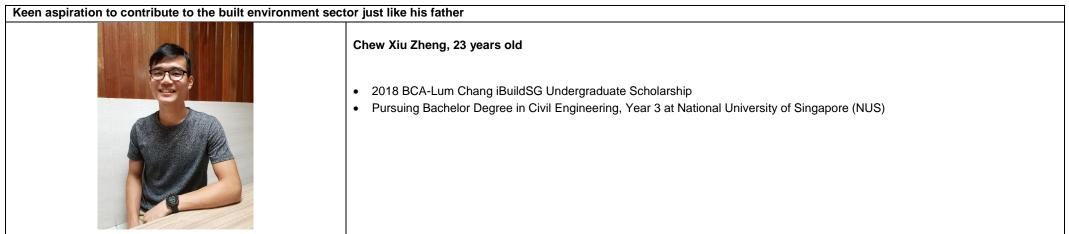
Koh Mun Yen is part of a set of triplets in her family. When she and her sisters were young, they used to talk about their dreams and ambitions. Mun Yen, with a keen passion in Art, always knew that becoming an Architect was the right choice for her.

Despite not obtaining sufficient points at the GCE 'O' level examinations to study Architecture at Singapore Polytechnic (SP), Mun Yen was determined not to let that hamper her from achieving her goal of becoming an Architect. She enrolled into the Landscape Architecture course at SP and strived to work even harder to secure a place in the Architecture course at NUS. As a testament to her commitment and drive, she graduated with a Diploma with merit in Landscape Architecture (top 5% of her cohort) and was awarded the Cicada Prize and National Parks Board Prize for achieving outstanding academic performance.

On top of working towards her long-standing ambition, Mun Yen also has a deep sense of giving back to the community. She actively mentored less fortunate primary school students and was awarded the Outstanding Mentor Award and International Mentoring & Tutoring (Silver Award) during her poly days.

During her undergraduate studies, Mun Yen is a role model to secondary school students. She inspires them through the facilitation of Design Thinking and Architecture workshops to widen their knowledge on Architecture and spur their thinking processes by getting them to design and build models.

Mun Yen is currently completing her internship in an Architecture firm and has gained a myriad of valuable skills and knowledge through participating in Architecture-related competitions in the firm. In 2020, she will be joining RSP Architects Planners and Engineers, one of the most established architectural practices in Singapore and the region, and a strong supporter of the iBuildSG Undergraduate Scholarship. Following her graduation, she hopes to hone her design skills as she progresses on in her career. Mun Yen also aspires to create new and refreshing buildings and obtain her certification to become a Registered Architect and Qualified Person in future.



Growing up, Chew Xiu Zheng has always been inspired by his father, who works in the built environment (BE) sector. When he was young, on the days that his father took him to his work place and to construction sites of projects that he was working on, Xiu Zheng's curiosity about buildings multiplied and got him more intrigued about the built environment.

Xiu Zheng is an active and energetic person who enjoys being outdoors; he is not one to be confined by a life behind a desk. He has played an active role in numerous school activities, such as canoeing during his Junior College days and participating in Cross Country races as an undergraduate. He believes that a career as a Civil Engineer is the right fit for him as it will be in sync with his nature as an outdoor person and would allow him to have dynamic day-to-day work activities out on sites.

He had the chance to exercise his leaderships skills as the Captain of NUS's Cross Country team. During his National Service, he received the prestigious Sword-of-Honour Award from Deputy Prime Minister, Teo Chee Hean, in 2015 for being the top-performing Cadet in his course in Officer Cadet School. Other than academic achievements, Xiu Zheng believes that soft skills such as leadership and interpersonal skills are key ingredients to effectively lead a team in a construction project.

Xiu Zheng is also in the Innovation and Design Programme (iDP) at NUS. The iDP helps sharpen the engineering and entrepreneurial skills of students with an emphasis on innovation and design, and provides them a pathway to learn and practise their engineering knowledge through real-world projects in a multi-disciplinary team setting. A project that Xiu Zheng worked on with course mates from the Mechanical and Electrical faculty involved the application of Design for Manufacturing and Assembly (DfMA) concept to develop an intelligent, self-balancing system for the lifting of Prefabricated Prefinished Volumetric Construction (PPVC) modules. The centre-of-gravity of a PPVC module is not at its geometric centre, which results in tilting during lifting and several man-hours to manually balance the module. Identifying a possible area of improving productivity for this, Xiu Zheng and his teammates worked in partnership with industry, to find a possible solution. The team designed an automated lifting frame that can detect and correct imbalances with minimal human input. The group successfully built and tested a working scaled-prototype at the end of the year-long project.

Xiu Zheng believes that a world of opportunities awaits him by being part of the iBuildSG Undergraduate Scholarship programme. Through the provision of structured training and development programmes, as well as training grants to support his upgrading and growth under the scholarship programme, he looks forward to a good head start in his career and aims to become a Professional Engineer in future.



Kow Yan Xia Dion had always wanted to work in the service line. Upon graduation from her 'O' level, she enrolled herself to Diploma in Hotel and Leisure Facilities Management at Singapore Polytechnic in 2015.

During her 3-year diploma studies in Hotel and Leisure Facilities Management, she started to gain interest in facilities management (FM) modules, the turning point for her to specialise in the FM field instead of the hotel line. After being given the opportunity to do her 6-months internship with a FM firm, she made up her mind that the FM field was where she wanted to establish her career after getting her Diploma.

When she graduated in 2018, she was awarded the BCA-EM Services iBuildSG Diploma Sponsorship, co-funded by EM Services Pte Ltd and jointly sponsored by Building and Construction Authority (BCA).

Dion is currently serving her bond with EM Services Pte Ltd as a Property Officer at Jalan Besar Town Council. She is responsible for ensuring that the HDB estates under her care are in good condition, through routine daily maintenance inspections. Her supervisors provide valuable on-job-training guidance, which helps boost her confidence in dealing with the residents to resolve issues smoothly. These experiences also aid in improving her communication and interpersonal skills.

Dion is grateful to receive the BCA-EM Service iBuildSG Diploma Sponsorship as the programme not only provides her the opportunity to start her dream career with a FM firm of her choice, but also creates a structured career pathway for diploma graduates like her.

Since 2013, EM Services Pte Ltd has been very supportive of the Diploma Sponsorship programmes. Tapping on this programme, the firm is able to groom new talents and increase the development of their workforce. Overall, the programme has provided them a platform and a source to secure and support new talents for the built environment sector.

Newfound passion to pursue career in lift secto	
	Muhammad Fadhli bin Ali, 23 years old
	<ul> <li>2018 BCA-Chevalier iBuildSG ITE Scholarship</li> <li>Currently working as Lift Supervisor at Chevalier Singapore Holdings Pte Ltd</li> </ul>
Taking broken home appliances apart when they were faulty, figuring out the mechanisms and reassembling parts to get them to work is not foreign to Muhammad Fadhli, who helped his father repair their home appliances since young. This also sparked his strong interest in mechanical engineering, which later led him to take up NITEC in Facility Technology (Air-Conditioning & Refrigeration) after 'N' Levels. He then went on to pursue further studies in Facility System Design at the Higher NITEC level.	
When he completed his National Service in October 2018, he was offered the iBuildSG ITE scholarship by Chevalier Singapore Holdings Pte. Ltd. As someone who loves challenges, he seized the opportunity to deal with much larger mechanical systems, including lifts, with the knowledge and skills he had gained in school.	
has learnt many new skills and gained knowledge that has all	usibilities including maintenance of lifts at properties such as condominiums and schools. within his short stint so far at Chevalier, he owed him to build up his confidence to troubleshoot and to quickly think of solutions to resolve technical issues. These challenges Positive encouragement from his colleagues who shared their vast experience in the sector further affirmed his newfound interest to

He hopes to be able to deepen his knowledge and skills in lift maintenance works at Chevalier and further his studies to achieve his aspiration as a lift engineer.

Upgrading in-sevice personnel with employer's support	
	<ul> <li>Li Koon Wai Jason, 28 years old</li> <li>2018 BCA-KTC iBuildSG Postgraduate Sponsorship (Part-time)</li> <li>Pursuing Master of Science (Civil Engineering) (part-time) at National University of Singapore (NUS)</li> <li>Currently working as Senior Project Engineer at KTC Civil Engineering &amp; Construction Pte Ltd</li> </ul>

Since graduating in 2015 with a Bachelor in Engineering (Civil) at National University of Singapore (NUS), Li Koon Wai Jason started his career as a project engineer with KTC Civil Engineering & Construction Pte Ltd.

While pursuing his bachelor studies, Jason had already set his mind to work for a contractor firm upon graduation as it would provide him a more in-depth training and understanding in the practical aspects of civil works in the built environment sector.

The basic civil engineering knowledge that he acquired during his bachelor studies proved advantageous when dealing with his current civil job scope.

In the 3 years working at KTC Civil Engineering & Construction Pte Ltd, he had numerous opportunities to be involved in projects of different scopes, such as the development of a plant producing modified soil under the company's growth strategy. He also helped to coordinate Civil and M&E trades for a developmental project in Changi East. However, Jason felt the need to strengthen his civil engineering knowledge by pursuing higher education to complement his work experiences.

Recognising Jason's potential, passion and commitment to his job, KTC Civil Engineering & Construction Pte Ltd decided to support his development by co-funding his part-time Master of Science (Civil Engineering) at the National University of Singapore through the iBuildSG Postgraduate Sponsorship (part-time) programme this year, jointly sponsored by Building and Construction Authority (BCA).

Through the years, KTC Civil Engineering & Construction Pte Ltd has been very supportive of the iBuildSG Undergraduate (full-time) Scholarship and Sponsorship programmes. Prior to this, the firm had tapped on various schemes under the programme to secure bright young talents and sponsor their employees in training and upgrading. Overall, the programme has provided them a platform to support and increase the development of their workforce.

Jason is honoured to be a recipient of the iBuildSG Postgraduate Sponsorship (part-time). He said, "I am grateful to my employer, KTC Civil Engineering & Construction Pte Ltd, and BCA for the opportunity to pursue the Master degree under the joint sponsorship. I am also very fortunate to benefit from such a programme implemented by BCA, sponsoring in-service personnel like myself. But more importantly, this is another pathway to learn about the latest technology in civil engineering. I believe that with this sponsorship, I will be better able to push myself to do well in my term at NUS and eventually, value add more effectively to my employer and the built environment sector."

#### Proud to be a Lift Specialist



#### Mr Mohamed Ashriey Bin Mohamed Yusof, 29 years old

- 2018 iBuildSG Building Specialist Sponsorship
- Pursuing Nitec in Technology Facility Technology (Vertical Transportation) (part-time)
- Currently working as a Technical Supervisor at Chevalier Singapore Holdings Pte Ltd (East Depot)

Many people do not realise the complexity of the equipment which power and help lifts and escalators run smoothly; these require highly skilled personnel to maintain in order to ensure they remain safe for all users. It is often something that the public takes for granted. When Mr Mohamed Ashriey works on a lift, he approaches each task meticulously, prioritising safety first to ensure each lift operates smoothly and meets the BCA requirements.

He shared that the most memorable moment in his career as a lift specialist was when he was tasked to execute brake adjustment on a traction motor for the first time. This task required him to don a safety harness as the traction motor is mounted on top of the lift beam inside the lift hoistway. He said, "For me, it was adapting to a different kind of working environment; having to work at height and within a small enclosed space everyday which was a major challenge for me at the beginning". Carrying out troubles hooting on lifts also requires patience, due to the repetitive nature of the job and the complexity of the equipment. His working experience in this industry so far had moulded him into a more resilient person who is able to perform his daily tasks in a fast paced environment.

Ashriey is currently a Technical Supervisor with Chevalier Singapore Holdings Pte Ltd. He has also completed the structured in-house training provided by the company. Now, he also helps to guide his new colleagues using the skills he has acquired from his seniors.

In addition to training opportunities provided by the company, Ashriey is also concurrently completing a part-time Nitec in Technology - Facility Technology (Vertical Transportation) and Higher Nitec in Mechanical Engineering under BCA's Building Specialist Sponsorship (BSS) programme. Juggling his busy work schedule, family and studies has not always been easy, but Ashriey does it well. He is a very driven individual willing to embark on learning opportunities presented to him to further enhance his knowledge.

He is grateful to Chevalier Singapore Holdings Pte Ltd for giving him the opportunity to be a part of the growing lift and escalator industry; this has opened a big window of opportunity for his career. He had shared that: "Working in the lift industry has reaffirmed my confidence in my abilities, and has made me a more responsible individual who takes utmost pride in my work".

### Annex D

### About the iBuildSG Tripartite Committee (TC)

The iBuildSG TC serves as a common platform for the government, unions, Institutes of Higher Learning (IHLs), Trade association and chambers (TACs) and professional bodies to attract, develop and retain Singaporeans in the BE sector. It supports the key strategies for a skilled and competent workforce, including attracting and retaining Singaporeans in the sector and building key competencies to support technology adoption. Some of the upcoming key initiatives under the iBuildSG TC include:

- a) Implementation of the Built Environment SkillsFuture Tripartite (BEST) Taskforce's Recommendations<sup>1</sup> which include:
  - (i) Updating the IHLs' curricula on key transformation areas,
  - (ii) Facilitating the adoption of structured internships in IHLs and firms, and

(iii) Encouraging BE personnel to upgrade their skills through taking up Continuing Education and Training (CET) courses

- b) Develop and implement a 5-year rebranding roadmap
- c) Develop a Skills Framework for BE sector which will create clearer career pathways for BE professionals

The iBuildSG TC committee meetings will be held every quarter. The first meeting will convene in Feb 2019.

<sup>1</sup>In October 2017, the Built Environment SkillsFuture Tripartite (*BEST*) Taskforce was formed to identify suitable measures to address gaps across the pre-employment training (*PET*), lead-in training and continuing education and training (*CET*) landscape.

### Annex E

### About iBuildSG Club

As part of the BuildSG transformation efforts, an office was set up to drive implementation of the ITM strategies. iBuildSG works closely with stakeholders such as TACs, industry firms, IHLs and mainstream schools, to uplift the perception and practices in the sector to attract, develop and retain more talents and provide better jobs for Singaporeans. It also functions as a career office for interested individuals interested in the Built Environment sector to find out more about careers, progression pathways and support for individuals to join and develop their skills in the sector.

To support our students outreach efforts, the iBuildSG Club will be established in April 2019 to engage and spark interest in students towards choosing BE-related courses and sustain their interest in the sector. Through targeted and meaningful engagement, the club aims to generate awareness and interest among the students in the BE sector, its transformation and careers, and in turn attracting more students into the sector.

### Objectives

There are 3 main objectives to iBuildSG Club:

- To nurture BE advocacy among students
- To promote greater awareness and understand of the sector's transformation efforts
- To generate interest and awareness about the BE sector and careers and in turn attract more students to join the sector

### **Target Audience**

iBuildSG Club members will be made up of secondary school, junior college and IHL students.

#### **Club Activities**

iBuildSG Club will organise activities that centred on the three key areas of ITM- Design for Manufacturing and Assembly (DfMA), Integrated Digital Delivery (IDD) and green building.

The club will engage members through the following activities:

- Learning Journeys and Site Visits
   Visits to project sites and places of interests, for example, shopping malls, residential buildings, offices, that promote the key areas of ITM
- <u>Skills Workshops and Career Talks</u> Workshops, talks and sharing sessions relevant to BE and personal development
- <u>Workshop / Competitions & Events</u>
   Participation of BCA events and competitions organised within the club
- <u>Social Media Engagement</u> Members will be updated of the latest industry developments, events and activities through emails and social media platforms