

MEDIA RELEASE

BCA ACADEMY PREPARES NEXT GENERATION WORKFORCE FOR THE FUTURE OF CONSTRUCTION

- First intake of students from Construction ITM-related BCAA Diploma and Specialist Diploma courses graduates today
- Benchmarking study concludes BCA's diploma programmes is comparable to those of local polytechnic institutes

Singapore, 27 November 2017 – Singapore's built environment sector is working towards the successful implementation of the Construction Industry Transformation Map (ITM) to realise the collective vision of an advanced and integrated sector that offers good jobs for Singaporeans. This includes the strengthening of the Singapore workforce through a suite of training programmes and professional courses to support the sector's transformation.

More professionals trained in key transformation areas

2. Today, the pioneering cohort of professionals trained in four ITM-related diploma and specialist diploma courses run by the BCA Academy received their graduation certifications at the graduation ceremony held at the Singapore University of Technology and Design Auditorium.

3. The new courses – Diploma in Architecture (Technology), Specialist Diploma in DfMA, Specialist Diploma in Lean Construction, and Specialist Diploma in Virtual Design Construction – were introduced in preparation for the changing needs of the sector in the key transformation areas of Design for Manufacturing and Assembly (DfMA) and Integrated Digital Delivery (IDD). Description of the new courses can be found in Annex A.

4. Diploma graduands this year were also the first to experience the Inter-Disciplinary Virtual Design and Construction Project (IVDCP). The programme saw final year diploma students collaborating with others across various disciplines to create a comprehensive Building Information Modelling (BIM) model. It was aimed to provide them early exposure to future construction management requiring greater and closer collaboration in the earlier stages of building projects, so that it reduces unnecessary reworks in the later stages.

Outstanding graduands

5. At the BCAA Graduation Ceremony, awards were presented to 71 outstanding graduands who have excelled academically and demonstrated exemplary qualities during their course of study.

6. Chairman Award recipient, Ms Neeky Tan Hui Ying, decided to quit her previous job and make a career switch to the built environment sector at age 28. She scored a perfect CGPA of 4.0 in the Diploma in Quantity Surveying programme, despite being a mature student and the need to take on a part-time job to support herself financially. While studying, she applied for a part-time position at East Asia Engineering & Construction Pte Ltd so that she could gain some better understanding of the industry. This move eventually benefitted her, as she was offered a full-time position at the company even before graduating. Neeky also demonstrated commendable qualities in and outside of school, including taking on the role of a class representative and participating in charity work during her free time.

7. Valedictorian of the 2017 specialist diploma cohort and merit certificate award winner, Heng Wui Meng Winston, is someone who exemplifies the true meaning of lifelong learning. Mr Heng has more than 23 years of experience as a project manager in the built environment sector. Being 58-years-old did not deter him from taking up the new course of Specialist Diploma in Lean Construction. Prior to this, he has attended more than 20 courses and seminars at BCAA to keep himself updated with the latest regulations and the new technologies introduced into the industry. Mr Heng is a role model to others because of how he had worked his way up and progressed in his career by actively seeking opportunities to improve his knowledge and skills beyond his scope of work.

8. For more information on the outstanding graduands of the 2017 Diploma and Specialist Diploma cohorts, please refer to Annex B.

BCAA as leading institute for built environment skills training and upgrading

9. BCAA has come a long way since its establishment as a training institute for Singapore's built environment sector in 1984. In a move to continually validate its course offerings, a benchmarking study of BCAA's existing eight diploma programmes was conducted by the National Recognition and Information Centre for the United Kingdom (UK NARIC) this year. It concluded that BCAA's diplomas are: a) Comparable to local Polytechnic Diplomas, Australian Diplomas and Year 1 of UK Degree programmes, and b) In line with international developments in the field of construction and use of technology.

10. Feedback from graduands also affirmed the training provided by BCAA is up-to-date and has practical application to their actual work / future professions. A recent Graduate Employment survey conducted by BCAA also found that 75% of the Academy's Diploma graduates secured full time jobs within six months after graduation. Refer to Annex C for more information.

11. "As the educational and training arm of BCA, the Academy is at the forefront of the latest developments in the built environment sector. Its course materials and curriculum are regularly updated to lead the transformation of the industry. We are also working closely with the other Institutes of Higher Learning to build up the capabilities of the next generation workforce to meet future demands as the sector undergoes transformation. We hope to see more professionals upgrading themselves and those keen to join built environment sector to pick up skills in the key transformation areas outlined in the construction ITM." said Dean of BCA Academy, Dr John Keung.

Issued by the Building and Construction Authority on 27 November 2017

About Building and Construction Authority (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, 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.

About BCA Academy (BCAA)

The BCA Academy is the education and research arm of the Building and Construction Authority (BCA). With the industry undergoing transformation to drive up productivity using game-changing technologies, BCA Academy takes on a leading role to equip PMETs with necessary competencies to support the development of an excellent built environment. Today, the BCA Academy is possibly the only institution in the world that provides a full range of training and education programmes tailored to meet the diverse needs of the built environment industry at all levels. From pre-employment training such as Diploma and Degree Programmes to continuing education training such as Specialist Diplomas, Certification Courses, Seminars and Executive Management Programmes, BCA Academy offers a full suite of training programmes for all levels of the industry. For more information, visit www.bcaa.edu.sg.

Annex A – Factsheet on BCA Academy Graduation Ceremony 2017

I. Description of programmes with pioneer graduands

Diploma in Architecture (Technology)

This programme will provide students with the fundamental knowledge and technical skills in architecture with an emphasis on Architectural Detailing, Design for Productivity and Sustainable Design. The programme focuses on the technological aspects of the architectural practice using BIM.

Specialist Diploma in Lean Construction

Lean construction adopts production management approach to project delivery. It strives to optimise project delivery through continuous improvements to minimise waste and maximise values to all stakeholders. The programme aims to equip industry practitioners with the knowledge of lean principles, lean construction approaches and methodologies for higher productivity.

Specialist Diploma in Virtual Design & Construction

VDC is an integrated approach that combines BIM and advanced management methods to improve productivity. The programme will provide insights into VDC methodologies such as Concurrent Engineering and Process & Production Management. Industry practitioners can apply the knowledge and skills gained to achieve higher quality and productivity in upstream and downstream of both design and construction phases.

Specialist Diploma in Design for Manufacturing & Assembly

DfMA is helping revolutionise construction, making it faster, safer and more reliable. It is a process whereby buildings are designed for ease of off-site manufacturing and efficiency of on-site assembly. This programme aims to equip industry professionals with the knowledge and skills to apply DfMA principles in construction projects to achieve greater quality and productivity. Industry practitioners will need to re-think its project design approaches and construction processes.

II. List of Diploma and Specialist Diploma courses in this year's graduating cohort

Table 1: Number of Diploma Graduands	
Programme (9 Diploma Programmes)	No. of Graduating Students
Diploma in Architecture (Technology)**	8
Diploma in Construction Engineering ⁺	139
Diploma in Construction Information Technology	46
Diploma in Design (Interior & Landscape)	47
Diploma in Electrical Engineering & Clean Energy	24
Diploma in Mechanical Engineering	25
Diploma in Quantity Surveying	47
Diploma in Strategic Facilities Management ⁺	30
Diploma in Geo-Spatial Information & Technology***	0
Total	366

⁺ For both full-time and part-time diploma programmes. The rest of the diplomas are full-time programmes.

**Programmes with pioneer graduating cohort

***The Diploma in Geo-Spatial Information & Technology programme does not have a graduating batch in 2017, the next graduating batch is in 2018.

Table 2: Number of Specialist Diploma Graduands	
Programme (11 Specialist Diploma Programmes)	No. of Graduating Students
Specialist Diploma in Architectural Technology	27
Specialist Diploma in Building Cost Management	45
Specialist Diploma in Building Information Modelling	160
Specialist Diploma in Construction Management	99
Specialist Diploma in Construction Productivity	130
Specialist Diploma in Facilities & Energy Management	47
Specialist Diploma in Interior & Landscape Design	43
Specialist Diploma in M&E Coordination	118
Specialist Diploma in Design for Manufacturing & Assembly**	23
Specialist Diploma in Lean Construction**	24
Specialist Diploma in Virtual Design Construction**	31
Total	747

**Programmes with pioneer graduating cohort

Annex B – Profiles of Outstanding BCA Academy Graduands

DIPLOMA GRADUANDS

Name: Neeky Tan Hui Ying

Course: Diploma in Quantity Surveying

Award: Chairman Award, Gold Award

Neeky is not the typical diploma student whom one will find at BCAA. She holds a business degree in marketing and had full-time job. However, at age 28, she decided to make a career switch to join the Built Environment sector, after being inspired by family members in the construction line.

Determined to excel in her new career path, she left her job to study full time in BCA Academy. She knew exactly what she wanted to achieve and went all out for it. For one, she proactively applied a part-time position at East Asia Engineering & Construction Pte Ltd to better understand the industry work processes while studying at BCAA. And even though mathematics was not her forte during her earlier school days, she did not let that stop herself from excelling in this diploma course. At the end of the day, her hard work and determination paid off. Not only did she score a perfect CPGA of 4.0, she also secured a full-time job before graduating.

Besides academic excellence, Neeky also demonstrated commendable qualities in and outside of school – taking up the responsibilities of a class representative and participating in charity work during her free time at Dog Adoption Drives and blood donation drives. All these accomplishments are reasons why Neeky is a deserving recipient of the Chairman Award this year.

Name: Lee Jia Ying Joanne

Course: Diploma in Architecture (Technology)

Award: Valedictorian, Silver Award

Joanne is among the pioneer graduating batch of students from the Diploma in Architecture (Technology) programme. She has performed exceptionally well in the accelerated diploma track, completing the three-year programme in two years and graduating with a GPA of 3.95.

She began her Architecture journey first in ITE, five years ago, where she studied NITEC in Space Design (architecture) and has never looked back since. She found her passion in Architecture when she realised the sense of joy and fulfillment she gets in understanding the kind of living spaces which a society needs and being part of the team that develops such spaces. Joanne is also a BCA scholarship holder and will be joining MOH Holding's new BIM Department upon graduation from BCAA. She hopes to create a greener, healthier and a more sustainable environment for our future generations one day.

SPECIALIST DIPLOMA GRADUANDS

Name: Heng Wui Meng Winston

Course: Specialist Diploma in Lean Construction

Award: Valedictorian, Merit Award

Mr Winston Heng works as a Manager at Chiu Teng Construction Pte Ltd. He is a certified CONQUAS Manager and has more than 23 years of experience as Project Manager in the Built Environment sector. Mr Heng is a role model to others because of how he had worked his way up to his current position through years of undaunted upgrading in knowledge and skills. He has attended more than 20 courses and seminars at BCAA to keep himself updated with the latest regulations and the new technologies introduced into the industry. He also demonstrated a strong ability to apply what he has learnt quickly as his company's Quality Assurance and Quality Control team was able to achieve high CONQUAS score under his leadership. He is determined to implement lean principles in his projects to help his company to achieve better productivity and greater heights.

Name: Wu Jianhua

Course: Specialist Diploma in Virtual Design & Construction

Award: Merit Award

Mr Wu Jianhua a Senior Design & Coordination Engineer and has more than 15 years' experience as main contractor and specialist contractor for residential and commercial projects. As a leader in project coordination works at his company, Mr Wu is constantly exploring ways to improve further productivity with the latest BIM tools. This specialist diploma programme provided him insights into VDC methodologies which he looks forward to implement in his projects. His belief in lifelong learning and passion for his job are reasons why he has excelled in this programme, deserving of a Merit award.

Name: Julianita Binte Salleh

Course: Specialist Diploma in Architectural Technology programme

Award: Bronze Award

Ms Julianita Binte Salleh began her career as a Technical Officer before becoming an architectural assistant. She gained experience in managing projects along the way through small-scale residential projects, as well as large dormitory and commercial projects. However, she understands the importance of upgrading to stay relevant and competitive in this industry, and thus decided to take on this programme. While it was a difficult period for her after losing one of her loved ones, Ms Julianita found strength to persevere on and excelled. She is among the recipients of Bronze Award for her excellent academic performance.

ABOUT THE AWARDS: Top 10% of the graduating students with an average score of at least 75 marks for the entire Diploma or Specialist Diploma programme are eligible for consideration for the Gold Award, Silver Award, Bronze Award, or Merit Certificate depending on the level of their academic achievements. The Chairman Award was introduced in 2016 and it recognises the outstanding all-rounded graduand from the cohort every year.

Annex C– Graduates’ feedback on training provided by BCAA

"All the knowledge and skills I have acquired in BCAA are very useful and I put them to good use at work. I know I have picked the right school and programme because despite being fresh from school, I am able to understand instructions and directions given to me, perform my work accurately and correctly, discuss with and offer solutions to my colleagues and boss at work, as well as coordinate with suppliers and sub-contractors. Though not to the extent of being proficient at the moment, this diploma programme has given me an extremely strong foundation in this field. Now it is up to me to utilise the skills and knowledge to progress further.

BCAA lecturers are often veterans of the building industry. They imparted not only knowledge, but valuable experiences and advice to young and new students/workers. I feel that learning from someone who has been in the field for decades is extremely rewarding because he/she knows the difficulties, problems and stress newcomers will often face. They know how the 'real world' works. The curriculum were taught in a more fitting way to enhance understanding and learning.

My journey in BCAA made me a better leader than I was before. It made me braver, more confident, taught me to speak up when necessary, and more importantly to ask when in doubt. Now I not only ask questions when in doubt, but I ask questions to find alternatives, to question the correctness and integrity of the information at hand."

Neeky Tan Hui Ying
Diploma in Quantity Surveying

"It has kickstarted my career at an early stage. Exposing me to many different things that I would never had learned and knew of. Being able to say that I study architecture makes me feel proud and hopeful. An industry full of possibilities and opportunities. In terms of technicality, problem solving and creative thinking. I am truly honored to be able to take part in the step towards creating a greener, healthier and a more sustainable environment for our generation and beyond."

Lee Jia Ying Joanne
Diploma in Architecture (Technology)

"Lean Construction adopts principles of Toyota Way to create reliable planning that can increase productivity by eliminating wastes. Programmes offered by BCAA are always latest and it keeps us abreast of the current regulations and technologies in the building industry. BCAA lecturers are highly qualified and their practice-oriented training equips us with very useful skills and knowledge required by the industry. BCA certificates are recognised worldwide and some workers were able go to other countries like UAE after getting their certificate from BCAA. As programme offered by BCA are well accepted by the industry, I always chose to attend courses in BCAA for my career advancement. With my latest SDip in Lean Construction, I hope to implement some of the Toyota Principles to increase productivity in all projects under my charge."

Heng Wui Meng Winston
Specialist Diploma in Lean Construction

"Specialist Diploma in Virtual Design and Construction (SDVDC) offered by BCAA is a practice-oriented, industry-recognised programme, which allow us to access advanced learning facilities and experience latest technologies. It is also a good platform for sharing knowledge with other construction professionals from different background. As the lead role in project coordination works, I am always exploring how to improve productivity further with latest BIM tools. This programme provides me insights into VDC methodologies and I will be able to apply these principles at my workplace."

Wu Jianhua
Specialist Diploma in Virtual Design & Construction