**One Day course on Infrastructure Planning for Township/Large-scale Housing Developments**

Importance of infrastructural provisions in support of township/ large-scale housing developments. In any large-scale public or private housing developments, physical infrastructure such as earthworks, roads, drains, sewers and utilities, are critically needed not only to enable the physical development of but also support modern community living in the new housing estates. In fact, no development can function properly and effectively without the timely provision of adequate infrastructural facilities and public utilities. Comprehensive and well-coordinated Infrastructure planning is a prerequisite in developing a new town or housing estate and is carried out in tandem with the master town planning and well in advance of any physical developments. It serves to establish the full infrastructure requirements and guide their timely implementation thereby ensuring quality, efficiency and cost-effectiveness in the infrastructure provisions for the proposed development.

**Venue**
IES Academy@Jurong East, Devan Nair Institute For Employment and Employability, 80 Jurong East Street 21, #04-10 Singapore 609607 (Near Jurong East MRT)

**Date and Time**
16 Sep 2016 to 16 Sep 2016
9am to 5pm
16 September 2016

**Contact Details**
Contact Person: Christine Lau
Email: christine.lau@iesnet.org.sg
Phone: 6461 1248
Fax: 6563 6030

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**Two-Day Short Course on Fire Design of Steel and Composite Structures to EC3 and EC4 by Professor Venkatesh KODUR and Professor TAN Kang Hai (Qualified for 12 PDUs by PEB)**

Abstract: The concept of structural safety, and in particular how structures are designed under extreme loading conditions, has come under increased focus since the collapse of WTC buildings following 9-11 disaster. Since fires played a crucial role in the collapse of WTC buildings, building performance under fire conditions has attracted significant attention in recent years. Further, there is an increased expectation from society-at-large on better performance of buildings under fire conditions. Thus structural engineers are expected to be familiar with the design principles governing fire safety in buildings. This course will provide the essential background for fire design of steel, and composite structures. Both behavior and design aspects related to structural fire design of steel, and composite structures will be covered in this course. The course will introduce design provisions specified in Euro codes for fire design of steel, concrete, and composite structures. For engineers who are not familiar with the Euro-terminology, the course instructors will go through the relevant terms for ambient and high-
temperature design. Also, examples and case studies will be presented to illustrate the applicability of fire design provisions in practical scenarios. Both Professors have been working in the field of structural fire engineering since 1990s and have extensive experience in the analysis, design and testing of steel, concrete and composite structures under fire conditions. <br><br> <a href="https://www.corenet.gov.sg/media/2032968/Course-Schedule-19-20-Sep-2016.pdf" target="_blank">Course Schedule 19-20 Sept 2016</a> <br><br> <a href="https://www.corenet.gov.sg/media/2032971/ntu-flier-short-course-19-20-sep-2016.pdf" target="_blank">Short Course Flyer 19-20 Sept 2016</a> <br><br>**Venue**<br>Nanyang Technological University. School of Civil and Environmental Engineering (CEE), Seminar Room A, Block N1, Level B1, N1-B1b-06, Car parks nearer to Block N1: Carpark D and Carpark A.<br>**Date and Time**<br>19 Sep 2016 to 20 Sep 2016 0900 to 1700<br>Day 1 : 9:00 am to 4:30 pm (Monday) ; Day 2 : 9:00 am to 5:00 pm (Tuesday)<br>Course Fees: S$500 per participant. To register for the course, please complete the registration form on page 3 of the flyer and email it to d.ptrc@ntu.edu.sg before 8 September 2016.<br>**Contact Details**<br>Contact Person: Debbie Low for Protective Technology Research Centre<br>Email: d.ptrc@ntu.edu.sg<br>Phone: 67905285<br>Fax:<br><br>**Building and Construction Authority**<br>**21 Sep 2016 to 22 Sep 2016**<br>**BEHAVIOURAL SAFETY FOR THE CONSTRUCTION INDUSTRY**<br>Safety is influenced by a number of factors such as workplace environment, managements commitment to safety, attitude or behaviour of working personnel towards safety, etc. Workers positive behaviour towards safety is considered one of the key factors in preventing accidents at workplaces. A successful introduction of behavioural safety program, focusing on identifying and reducing unsafe behaviour and reinforcing safe behaviour is one means of improving safety at workplaces. Behavioural Safety is a methodology used to improve safety culture through change of behaviour of working personnel in an organisation. This methodology has been applied successfully in other industries like petrochemical and manufacturing and is gaining popularity in the construction industry. Learning the behavioural safety approach will help participants to apply the concept of monitoring safe & unsafe behaviours of working personnel at their workplace and help to prevent accidents.<br><br>**Venue**<br>BCA Academy, 200 Braddell Road, Singapore 579700<br>**Date and Time**<br>21 Sep 2016 to 22 Sep 2016 0900 to 1730<br>Course Fee: S$450.00 per participants<br>(Fee includes course materials, lunches and refreshments)<br>**Contact Details**<br>Contact Person: Customer Service Officer<br>Email: bca_academy@bca.gov.sg<br>Phone: 6248 9999<br>Fax: 6258 0558<br><br>**Building and Construction Authority**<br>**21 Sep 2016 to 23 Sep 2016**<br>**MANAGEMENT OF WATER AND ENVIRONMENTAL SERVICES FOR ESTATE MANAGERS**<br>Property and facilities management is a growing industry in Singapore. With the increasing number of strata residential developments in Singapore and rising expectations from the home occupiers for proper maintenance of the estate, it is essential to equip the estate managers in effective management of their facilities and premises, in particular to the water supply, sanitary, drainage systems and environmental control. The course aims to provide an overview of the relevant local authorities regulatory requirements and guidelines. It will highlight the good management and maintenance practices for water, drainage and sewerage services, wet facilities and waste collection system. Water Efficiency Measures will also be covered.<br><br>**Venue**<br>BCA Academy, 200 Braddell Road, Singapore 579700<br>**Date and Time**<br>21 Sep 2016 to 23 Sep 2016 0900 to 1730<br>Fee (incl. of GST): S$780.00*<br>Course materials, lunches and refreshments will be provided.<br>**Contact Details**<br>Contact Person: Customer Service Officer<br>Email: bca_academy@bca.gov.sg<br>Phone: 6248 9999<br>Fax: 6258 0558
SEMINAR ON BUSINESS EXCELLENCE AND QUALITY MANAGEMENT

To encourage enterprises in the built environment sector to take a holistic approach towards building capabilities and developing sustainable long-term business plans, BCA and SPRING launched the integrated assessment scheme for Business Excellence (BE) and ISO 9001 for Quality Management System standards. In this seminar, SPRING will share on the benefits of the integrated assessment and funding support available, and several certified companies will also share on their journey. Key changes in the ISO 9001:2015 and the transition audit requirement will also be presented.

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<td>BCA Academy, 200 Braddell Road, Singapore 579700</td>
<td>21 Sep 2016 to 21 Sep 2016 1400 to1800 Fees (incl of GST): S$180* / S$200 Early Bird who make payment by 5pm, 24 Aug 2016; Min 3 applicants from the same organisation; BCA Young Leaders and BCAA Alumni card holders.</td>
<td>Contact Person: Customer Service Officer Email: <a href="mailto:bca_academy@bca.gov.sg">bca_academy@bca.gov.sg</a> Phone: 6248 9999 Fax: 6258 0558</td>
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CERTIFICATION COURSE ON INTERIOR FINISHING COORDINATION

Interior finishing and decorating are major components of a building cost. Today, clients demand high quality interior finishes in commercial and residential spaces. The coordinating of interior decoration projects is a professional role that requires specific skills. An interior finishing coordinator needs to have knowledge of various interior finishes, fixtures and fittings, M&E services, construction methods and related building regulations. The ability to comprehend architectural, structural and M&E drawings and appreciate the design intent of the interior designer is just as important. Good interpersonal skills to communicate effectively with other members of the project team to ensure timely and satisfactory completion of the project are added value to the employer. This course will develop participants' coordination skills in interior finishing and enhance their confidence to undertake new roles. It allows graduates to move to higher supervisory and management roles in this specialised area of work. It also opens up opportunities for a career switch to be coordinators for interior design and decoration firms.

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<td>BCA Academy, 200 Braddell Road, Singapore 579700</td>
<td>26 Sep 2016 to 25 Jan 2017 1830 to2130 Duration: 4 months (108 hours) (Frequency: 2-3 times per week) Fee (incl of GST): S$2,600.00</td>
<td>Contact Person: Customer Service Officer Email: <a href="mailto:bca_academy@bca.gov.sg">bca_academy@bca.gov.sg</a> Phone: 6248 9999 Fax: 6258 0558</td>
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WAY-FINDING AND SIGNAGE DESIGN

Way-finding and signage design should be considered holistically as part of the building and facilities planning process. This is to ensure that people can have safe and easy access to amenities and facilities provided in a building. Through this course, the participants will have a good appreciation of how way-finding plays a vital role in Universal Design (UD), especially in supporting the ageing population; learn of the principles, design considerations and communication strategies of way-finding and signage; and be familiar with the design requirements set out in SS 599:2014 Guide for Wayfinding Signage in Public Areas. The Instructor will also share his experiences through the use of positive and negative case-studies.

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<tr>
<td>BCA Academy, 200 Braddell Road, Singapore 579700</td>
<td>27 Sep 2016 to 27 Sep 2016 0900 to1700 Fee (incl of GST): S$480.00</td>
<td>Contact Person: Customer Service Officer Email: <a href="mailto:bca_academy@bca.gov.sg">bca_academy@bca.gov.sg</a> Phone: 6248 9999 Fax: 6258 0558</td>
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**BIM SCHEDULING AND PROCESS MANAGEMENT**

Lean Construction techniques aim to improve processes through waste minimisation. A synergy of Lean Construction and Building Information Modelling (BIM) will certainly have a profound impact on productivity and hence profitability. In this workshop, Virtual Design and Construction (VDC) is introduced as the combination of 4D BIM and lean construction management to achieve optimization of the construction schedule for continuous flow of construction process and better planning in construction management.

**Venue**

BCA Academy, 200 Braddell Road, Singapore 579700

**Date and Time**

28 Sep 2016 to 29 Sep 2016 0900 to 1700

Lunch and refreshments will be provided.

**Contact Details**

Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

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**LIFT AND ESCALATOR COURSE FOR ENGINEERS**

This technical course covers design principles, installation of equipment, testing and commissioning, operations and maintenance including periodic examination and inspection of lifts and escalators. This is a 5-day course which comprises both classroom lectures and practical sessions. Participants will gain in-depth technical knowledge on lifts and escalators, with particular emphasis on the examination, inspection and testing of such equipment. This course aims to deepen the understanding of practising engineers in the examination, inspection and testing of lifts and escalators.

**Venue**

BCA Academy, 200 Braddell Road, Singapore 579700

**Date and Time**

29 Sep 2016 to 7 Oct 2016 0900 to 1730

Duration: 5 days

Fee (incl of GST): S$3,450.00

**Contact Details**

Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

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**SEMINAR ON ENSURING SAFE DESIGN & CONSTRUCTION TRANSFORMING OUR BUILT ENVIRONMENT**

In recent years, innovative construction technologies including Prefabricated Prefinished Volumetric Construction (PPVC) and Mass Engineered Timber Structures such as Glued Laminated Timber (Glulam) and Cross Laminated Timber (CLT) have been adopted in a number of projects. This seminar aims to raise the safety standards of the industry and share good practices as well as shortcomings observed in both the design and construction of building works, in particular in changing the way we build through the use of game-changing technologies.

**Venue**

BCA Academy, 200 Braddell Road, Singapore 579700

**Date and Time**

30 Sep 2016 to 30 Sep 2016 0900 to 1700

Fee (incl of GST): S$290.00 / S$320.00

* Discounted fee is only applicable for: Early Bird who make payment by 5pm, 30 Aug 2016; Companies sending 3 or more registrations; BCA Young Leaders, BCAA Alumni Card Holders.

**Contact Details**

Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

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**SUPERVISION OF PILING WORKS**

Various challenges are present in pile foundation works due to the uncertainties and variability of the ground conditions. Once the piles are installed, they are expected to function throughout their lifetime. During the lifetime of the building, the foundation is rarely inspected for its continued structural integrity and stability. Supervision of piling works for building foundation is therefore essential and critical in ensuring the quality of
construction works and safety of building structures. This short course imparts to participants the essential knowledge of good construction practices, supervision of piling works, regulatory requirements and testing of pile foundation works.

**Venue**
BCA Academy, 200 Braddell Road, Singapore 579700

**Date and Time**
4 Oct 2016 to 13 Oct 2016
1830 to 2130
26th Run: 4, 6, 11 & 13 Oct 2016
Fee (incl of GST): $700.00

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Building and Construction Authority**

**Date and Time**
4 Oct 2016 to 13 Oct 2016
1830 to 2130

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Venue**
BCA Academy, 200 Braddell Road, Singapore 579700

**Date and Time**
5 Oct 2016 to 14 Oct 2016
1830 to 2130
Duration: 12 evenings (Mostly Tue & Fri)
(10 Lectures + 1 week break + 2 Project Presentation sessions)

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Building and Construction Authority**

**Date and Time**
7 Oct 2016 to 18 Nov 2016
1830 to 2130
Duration: 12 evenings (Mostly Tue & Fri)
(10 Lectures + 1 week break + 2 Project Presentation sessions)

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Building and Construction Authority**

**Date and Time**
14 Oct 2016 to 7 Nov 2016
1830 to 2130
Duration: 12 evenings (Mostly Tue & Fri)
(10 Lectures + 1 week break + 2 Project Presentation sessions)

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Building and Construction Authority**

**Date and Time**
5 Oct 2016 to 5 Oct 2016
0900 to 1700
Fee (incl of GST): $500.00
Lunch and refreshments will be provided.

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Building and Construction Authority**

**Date and Time**
5 Oct 2016 to 14 Oct 2016
1830 to 2130
 Fee (incl of GST): $660.00
5, 7, 12 & 14 Oct 2016; 4 evenings (12 training hrs)

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558

**Building and Construction Authority**

**Date and Time**
7 Oct 2016 to 18 Nov 2016
1830 to 2130
Duration: 12 evenings (Mostly Tue & Fri)
(10 Lectures + 1 week break + 2 Project Presentation sessions)

**Contact Details**
Contact Person: Customer Service Officer
Email: bca_academy@bca.gov.sg
Phone: 6248 9999
Fax: 6258 0558
UNIVERSAL DESIGN (UD) ASSESSORS

While BCA has made significant progress in leading the building industry towards Universal Design (UD) adoption through funding and seminars, the industry is still lacking in their knowledge and application of UD. There is a need to build the industry's capability and capacity in adopting UD so as to create an inclusive and age-friendly built environment for all ages. The 4-day programme aims to provide an overview of the various aspects of adopting an inclusive approach to design. The course will adopt a multidisciplinary approach to gain an appreciation of UD through the direct contact with varied user groups in a focused context; the pragmatics of UD supported by an understanding of the theoretical framework; and the ability to source for and apply qualitative & quantitative information regarding the fit between human and the built environment.

- **Venue**: BCA Academy, 200 Braddell Road, Singapore 579700
- **Date and Time**: 14 Oct 2016 to 7 Nov 2016
- **Contact Details**: Contact Person: Customer Service Officer
  Email: bca_academy@bca.gov.sg
  Phone: 6248 9999
  Fax: 6258 0558

BUILD SMART CONFERENCE 2016

The first day of the conference focuses on the various aspects of Design for Manufacturing and Assembly (DfMA), namely Mass Engineered Timber Construction, Prefabricated Prefinished Volumetric Construction (PPVC), Advanced Precast Construction, and Structural Steel. On Day 2, the focus is on Lean Construction, Virtual Design and Construction (VDC) and Building Information Modelling (BIM).

- **Venue**: Max Atria @ Singapore Expo, Level 2
- **Date and Time**: 18 Oct 2016 to 19 Oct 2016
- **Contact Details**: Contact Person: Customer Service Officer
  Email: bca_academy@bca.gov.sg
  Phone: 6248 9999
  Fax: 6258 0558
  Fee: $400 (for 1-Day Pass) / $770 (for 2-Day Pass)
  (Discounted fee applicable for early bird registration by 9 Sep 2016)

Institution of Engineers, Singapore

One Day course on Working Safety at Height

Construction, shipping and manufacturing industries are the most prone to the hazards of working at height, and have attracted the most attention in Singapore's quest for improved workplace safety. Working at height is the biggest single cause of accidents, and falling from height the biggest cause of fatalities. Not only Singapore but the entire world suffers from this common source of accidents and injuries, to the point that there is a lot of information available on this topic. However, there is also considerable misunderstanding of both the causes of the accidents and proper ways to prevent or reduce the risks. The persisting problems with working at height in Singapore demand that professionals serious about controlling the risks of working at height should know more than the basics of the activity, beyond the Dos and Don'ts. The recent Code of Practice for Safely Working at Height should be thoroughly understood and applied to minimize the accidents in this regard. This course will provide the extra background required to understand the complexities of the problem. The presentation will be mainly keyed to the Code of Practice.

- **Venue**: Devan Nair Institute for Employment and Employability (e2i), 80 Jurong East Street 21, Singapore 609607 (To be confirmed)
- **Date and Time**: 21 Oct 2016 to 21 Oct 2016
- **Contact Details**: Contact Person: Christine Lau
  Email: christine.lau@iesnet.org.sg
  Phone: 64611248
  Fax: 65636030

Institution of Engineers, Singapore

Design for Safety Appreciation Course

- **Venue**: Devan Nair Institute for Employment and Employability (e2i), 80 Jurong East Street 21, Singapore 609607 (To be confirmed)
- **Date and Time**: 21 Oct 2016 to 21 Oct 2016
- **Contact Details**: Contact Person: Christine Lau
  Email: christine.lau@iesnet.org.sg
  Phone: 64611248
  Fax: 65636030
The Design Phase is the earliest opportunity to incorporate Safety into a construction project. Just as productivity can be enhanced with early planning, so is the greatest impact for safety. Designing for safety starts at the conceptual and planning phases of a project with collective and conscious decisions by stakeholders about the design, methods of construction and later demolition, and also the materials used which enhance the safety of the building or structure. In 2008, WSH Council launched the Guidelines on Design for Safety in Buildings and Structures, followed by the DfS Coordinator Course in 2010. In addition to building DfS capabilities of stakeholders, WSH Council has developed the DfS Recognition Scheme which was launched in 2011. Consisting of the DfS Mark and DfS Award, the Scheme aims to recognise competent and outstanding projects that have addressed risk through design and hence ensure safe & timely completion of the project.

Venue: IES Academy@Jurong East, Devan Nair Institute For Employment and Employability, 80 Jurong East Street 21, #04-10 Singapore 609607 (Near Jurong East MRT)
Date and Time: 18 Nov 2016 to 18 Nov 2016
9am- 6pm
18 November 2016
Contact Details: Contact Person: Christine Lau
Email: christine.lau@iesnet.org.sg
Phone: 6461 1248
Fax: 6563 6030

Association of Consulting Engineers, Singapore
20 Jan 2017 to 20 Jan 2017

ACES Preparation Course for PPE Exam Part 1(Common) Professional Conduct and Ethics

Practice of Professional Engineering Examination has been implemented for a number of years. Engineers find the scope of the subjects is very wide, often engineers do not know how to approach and prepare for the examination. This course is aim to assist Engineer in preparation of the Examination. Board view and the purposeful meaning of the examination will be discussed, the trainer will brief weakness and common mistakes made by candidates who responded to the exam questions. This course will assist engineers to have in depth understanding of the Professional Engineer Act and Rule which most engineers find it is difficult to comprehend.

Venue: to be confirmed
Date and Time: 20 Jan 2017 to 20 Jan 2017
1400 to1800
2.00 pm to 6.00 pm
20 Jan 2017 (Fri)
Contact Details: Contact Person: Lilian Lean
Email: registration@aces.org.sg
Phone: 63242682
Fax: