

SGUNITED SKILLS PROGRAMME

Built Environment



Up-Skill in Building Systems, Performance & Sustainable Design

Course code: GED

Course Overview

The course aims to equip you with the knowledge of various building systems and develop competency in sustainable design concepts, energy audit and management, application of energy efficiency technologies and energy economy.

Career Opportunities

Upon completion of the course, graduates can look forward to career opportunities in roles such as:

- Energy Auditor
- Environment Sustainability Designer
- Facilities Manager
- M&E Engineer

Minimum Entry Requirement

- Singapore Citizens and Singapore Permanent Residents, aged 21 & above
- At least a Polytechnic Diploma or ITE Technical Diploma/ Technical Engineer Diploma/ Work-Learn Technical Diploma in Science or Engineering, or equivalent.

Applicants who do not meet the entry requirements may be considered for admission to the course based on evidence of at least 5 years of relevant working experience or supporting evidence of competency readiness. Suitable applicants who are shortlisted may have to go through an interview and/or entrance test. The Polytechnic reserves the right to shortlist and admit applicants.

Important information for you

With the new support scheme, you can now earn up to \$1,200 per month by attending courses and equipping yourself with industry-relevant skills and knowledge.



View courses

Find all courses at:
www.tp.edu.sg/sgus



Application Period

24 July – 7 September 2020
[APPLY HERE](#)



Training Allowance

- Min. 75% attendance requirement



Nett Course fee

6-month course - \$500
12-month course - \$1000
Use your SkillsFuture Credits!

Click [here](#) for FAQ.

Reach out to us!

✉ sgus@tp.edu.sg ☎ 6788 1212

UP-SKILL IN BUILDING SYSTEMS, PERFORMANCE & SUSTAINABLE DESIGN

26 OCTOBER 2020 INTAKE

Course fee: **\$500.00**
 Course Duration: **6 months | Full day training**
 Course commencement date: **26 October 2020**
 Application period: **24 July – 7 September 2020**

APPLY NOW
COURSE CODE: GED

Specialist Diploma in Energy Management & Sustainable Design	Course Outline
IESVE Building Energy Modeling and Simulation - Basic Level	Course Outline
IESVE Building Energy Modeling and Simulation - Advance Level	Course Outline
Design Thinking in Action - The SEE Cycle	Course Outline
Robotic Process Automation for Beginners	Course Outline
Fundamentals of Cyber Security	Course Outline
Industry Project/Industry Attachment	Course Outline

COURSE OUTLINE

Specialist Diploma in Energy Management & Sustainable Design

The course aims to equip you with the knowledge of various building systems and develop competency in sustainable design concepts, energy audit and management, application of energy efficiency technologies and energy economy.

What you will learn

Certificate in Building Systems

- Mechanical and Air Conditioning Systems
- Electrical and Lighting Systems

Certificate in Building Performance & Sustainability

- Energy Management and Audit
- Sustainable Design

[BACK](#)

IESVE Building Energy Modeling and Simulation (Basic Level)

This training course is to equip the trainee to adopt the building performance simulation / design options in order to have better building design for energy efficiency / savings.

What you will learn

- Project Settings
- ModelIT & Suncast
- FlucsPro
- Radiance IES
- Apache – Building Template Manage
- Apache – Cooling load calculations
- Apache – Dynamic simulations (load)

[BACK](#)

IESVE Building Energy Modeling and Simulation (Advance Level)

Buildings constitute the largest energy-consuming sector, with one third of all the final energy and half of global electricity consumed. They are also responsible for one – third of the global carbon emissions.

What you will learn

Participants will be equipped with the skills to analyze the building performance simulation / design options in order to evaluate building energy consumption / savings.

[BACK](#)

Design Thinking in Action - The SEE Cycle

This course will help non-designers sift through the jargon and gain insight into the cyclical and highly iterative creative thinking process. Participants will be encouraged to adopt an open and expansive mindset that will embrace productive failure, risk-taking and deep inquiry

What you will learn

- Overview of Design Thinking
- Introduction to The SEE Cycle
- Beginning with The Right Mind-set
- Presenting The Design Challenge
- The Power of Empathy
- Identifying the Issue
- Deconstruction and Reconstruction
- Presentation and Critique
- Generating New Ideas
- Discovering the Impossible
- Distilling the Best
- Validating Viable Options
- Presentation and Critique
- Summary and Conclusion

[BACK](#)

Robotic Process Automation for Beginners

This course aims to give you a glimpse into the limitless possibilities of robotic process automation and learn how to use RPA to automate repetitive, computerized administrative tasks.

What you will learn

- Introduction to RPA: What is it?
- Learn to develop a basic RPA script
- Best practices for automation

[BACK](#)

Fundamentals of Cyber Security

The course focuses on the fundamental principles of cybersecurity and lays the foundation for intermediate and advanced topics.

What you will learn

- Basic principles of cybersecurity
- Authentication, authorisation and accounting
- Types of controls
- Basic concepts of risk assessment and treatment
- Common types of risks and applicable controls

[BACK](#)

Industry Project/Industry Attachment

This programme involves project-based learning, where you are required to be either attached to companies or work on real-life projects for companies or centres, related to your course of study. You are expected to undertake various activities discussed with and assigned by the supervisors or participating host organisations. The programme enables you to apply knowledge and skills acquired in the course of your study to address practical problems in the real workplace.

[BACK](#)

The information in this brochure is accurate at the time of updating (22 Jul 2020).



Temasek Skillsfuture Academy

 21 Tampines Avenue 1, East Wing 1A
Level 3, Unit 81, Singapore 529757

 www.tp.edu.sg/tsa

 6788 1212

 tsa@tp.edu.sg

 @TSAatTP

 [tsa.tp](https://www.instagram.com/tsa.tp)