

## **Academy for Continuing Education**

ACE is the continuing education and training arm of RP. We promote lifelong learning amongst working adults so that they can remain valuable participants in a knowledge-based economy. ACE offers various academic and executive programmes for aspiring professionals.

# **Failure Analysis of Advanced Composites**



Course Date(s) : 18 March 2019 Course Duration : 9:00am-5:00pm

**Course Venue**: Republic Polytechnic Campus

Course Fee : As below

Full Course Fee (Others)	Singapore Citizens Workfare Training Scheme (WTS)	Singapore Citizens aged 40 & above	SME-employed Singapore Citizens	Singapore Citizens aged below 40 OR Singapore PR
\$288.90	\$19.17	\$28.89	\$32.67	\$86.67

**SkillsFuture Credit approved** 

**Registration Link:** 

https://bit.ly/2CWLunK

<u>unK</u>

**Enquiries:** 

ACE@RP Phone: 6510 3000 Email: ACE-Help@rp.edu.sg Website: www.rp.edu.sg/ace





### COURSE SYNOPSIS

Composites are orthotropic in nature and fails in a complex manner under various loading conditions which makes it a hard problem to analyze. This course aims to introduce mechanical testing of composites to determine the failure modes and damage mechanisms.

Participants will also be exposed to basic concepts of the finite element analysis of composites with simple geometry and loading conditions.

### PROGRAMME OUTLINE

#### Session

**Theory:** Introduction to failure analysis of composites

- Failure analysis process
- Failure modes of composites

**Practical:** Mechanical testing of composites

Practical: Introduction to finite element analysis software

- Hands-on session on finite element analysis software
- Case study for practice

### **TARGET AUDIENCE**

- Working adults who wish to deepen their skills and knowledge in failure analysis of composite.
- Design engineers who wish to be exposed to FEA analysis

### **CERTIFICATION**

Participants will be awarded the Certificate of Accomplishment issued by Republic Polytechnic upon meeting 80% of attendance requirement.





### **TRAINERS' PROFILE**

#### May Sim (Dr)

May graduated from the University of Manchester Institute of Science and Technology (UMIST) with MSc in Corrosion Science and Engineering, and went on to pursue a PhD in Aeronautical Engineering from Loughborough University. Upon completing her PhD, she joined SIMTech as a researcher, focusing on using Non-Destructive Techniques, mainly X-rays for materials characterisation applications. With more than 7 years research experience, she has published more than 15 scientific journal and conference articles. Prior to joining RP, she was an International Sales Manager for a company specializing in supplying high quality, high performance radiation sources used mainly in non-destructive test devices for inspection application in the downstream oil and gas sectors. She has vast experience in using NDT techniques for inspection and has completed the ASNT curriculum and examination for Level II in Liquid Dye Penetrant and Magnetic Particle Inspection.



