jsit PRECISION ENGINEERING



PEARL

PE Assessment and Reskilling Lab

Why us?

- Co-created by NYP **AND** industry professionals
- Emphasizes hands-on learning tailored to practical needs
- On-site training led by industry experts
- Joint assessments by NYP and industry trainers

Who should apply?

Individual who wishes to:

- Take up beginning role, or non-technical role in PE company
- Start as CNC operator or machinist, enhancing his/her skill set for PE
- Embark on foundational training for operating basic conventional machines like turning, milling, and grinding

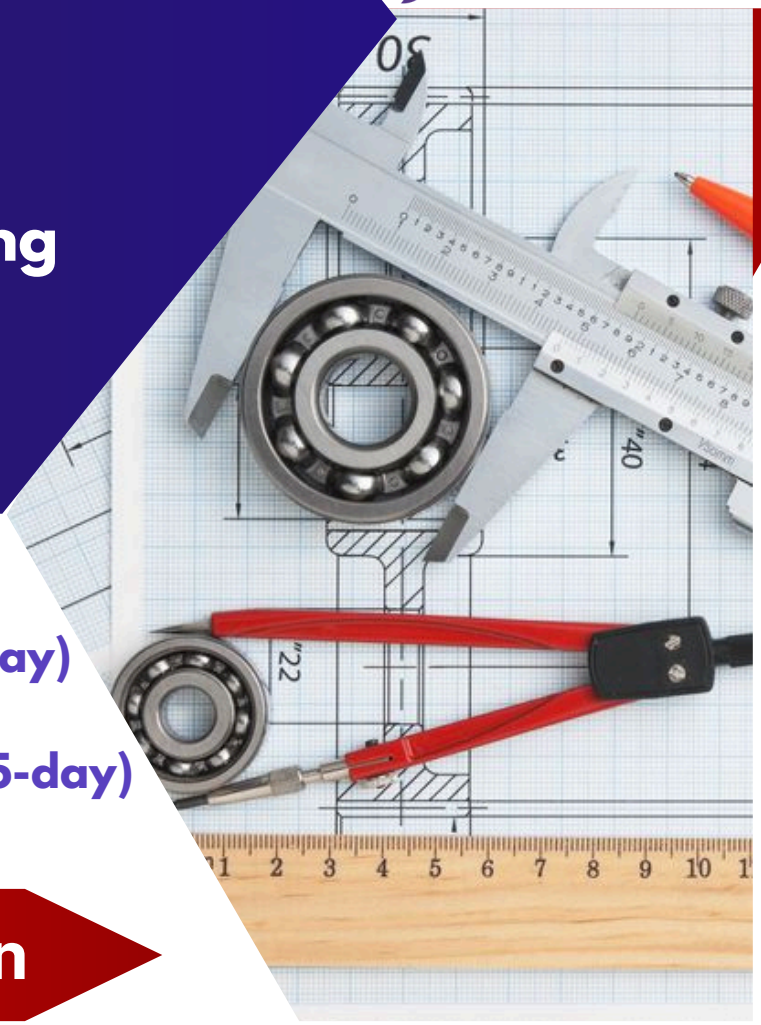
Reach out to us at: jsit_pe@nyp.edu.sg

PE** denotes **Precision Engineering

PEARL

Basic Metrology & Interpretation of Drawing (9-Day course)

IT CONSISTS OF:



- **Basic Metrology (1.5-day)**
- **Interpretation of Drawing (1.5-day)**
- **Maths for Machinist (1-day)**
- **Practical Training @ Company (5-day)**

What Will You Learn

- Basic skills to perform **calculations**, interpret **engineering drawing**, perform **dimensional measurement**;
- Understand **symbols**, **abbreviations**, **annotations**, **projections**, **engineering drawings**, and interpret **geometric dimensioning** and **tolerancing symbols**;
- Identify **errors in measurement** and use of **hand-held measuring equipment**.

Who should apply

This training is tailored for individuals with no PE background joining a PE company as Operators, Machinist, QC personnel or non-technical roles personnel.

PEARL

CNC Milling (9-Day course)



IT CONSISTS OF:

- Introduction to CNC (1-day)
- Operation of CNC Milling (3-day)
- Practical Training @ Company (5-day)

What Will You Learn

- Understanding CNC **technologies** and the fundamentals of CNC **programming codes (G/M code)**;
- **Hands-On** experience with CNC Machine that includes key operations such as setting up of **datum/workpiece**, preparing of **cutting tools** and execution of CNC **programming script**;
- Exposure to basic machine **maintenance** and **workplace safety**.

Who should apply

This training is tailored for individuals with a general engineering background, but who are not specifically trained in PE. It aims to provide them with basic skills necessary to begin roles as CNC operators or machinists.

PEARL

CNC Turning (9-Day course)



IT CONSISTS OF:

- CNC G-code (1-day)
- CNC Turning (3-day)
- Practical Training @ Company (5-day)

What Will You Learn

- Understanding CNC **technologies** and the fundamentals of CNC **programming codes (G/M code)**;
- **Hands-On** experience with CNC Machine that includes key operations such as setting up of **datum/workpiece**, preparing of **cutting tools** and execution of CNC **programming script**;
- Exposure to basic machine **maintenance** and **workplace safety**.

Who should apply

This training is tailored for individuals with a general engineering background, but who are not specifically trained in PE. It aims to provide them with basic skills necessary to begin roles as CNC operators or machinists.

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Conventional Machining (9-Day course)



IT CONSISTS OF:

- Conventional Machining (4-day)
- Practical Training @ Company (5-day)

What Will You Learn

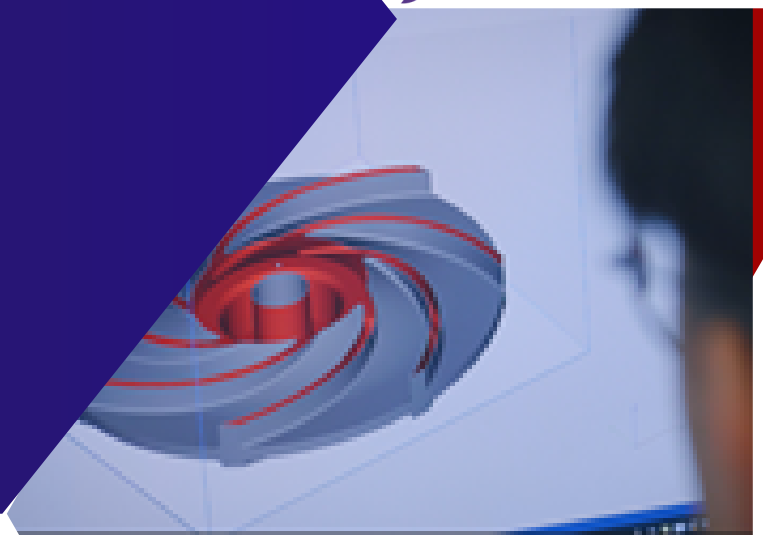
- Introduction to types of conventional machining processes specifically **turning**, **milling** and **grinding** that are commonly used to fabricate precision components;
- **Hands-on** application of basic **cutting processes** such as **machining set-up** and **workpiece holding**

Who should apply

This training is tailored for individuals with a general engineering background, but who are not specifically trained in PE. It aims to provide them with basic skills necessary to begin roles as operators or machinists on basic conventional machines (e.g. turning, milling and grinding).

PEARL

Additive Manufacturing (10-Day course)



IT CONSISTS OF:

- CAD Modelling (2-day)
- Additive Manufacturing (3-day)
- Practical Training @ Company (5-day)



What Will You Learn

- Basic skills to perform CAD modelling and Additive Manufacturing (AM) for industry applications;
- Hands-On experience with CAD modelling (sketch and 3D modelling) and AM (Build file setup, printing and post processing, including Health and safety);
- Understand key AM technologies such as Powder Bed Fusion (PBF) & Binder Jetting (BJ), Directed Energy Deposition (DED), Material extrusion (MEX), Material jetting (MJT), Vat photopolymerization (VPP) etc

Who should apply

This training is tailored for individuals with no or some engineering background or not trained in PE (AM). It aims to provide them with basic skills necessary to begin roles as AM operators or technologists, using industry AM machines, or engineers using AM in their applications

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Course Fee: $2,500/course

You Pay

$250
($317.50 w/GST)

SC >= 40yrs Old; *or*
SC & SPR under SME; *or*
LTVP plus under SME

You Pay

$750
($817.50 w/GST)

SC < 40yrs Old; or
SPR; or
LTVP plus

All Singaporeans aged 25 and above can use their SkillsFuture Credit

SC - Singapore Citizen, SPR - Singapore Permanent Resident
SME - Small Medium Enterprise, LTVP - Long Term Visit Pass

- **Programme is funded by SkillsFuture Singapore**
- **NTUC/NTUC Starter members are eligible for 50% subsidy on the unfunded course fee support under the UTAP programme. Visit e2i.sg/utapmembers**
- **Company eligible for SFEC can claim 90% of out-of-pocket course fees and absentee payroll. Visit for.edu.sg/nyp-jsit-sfecclaim**

Click on the link for the PEARL courses on MySkillsFuture Portal:

https://www.myskillsfuture.gov.sg/content/PEARL

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