



SINGAPORE QUALITY INSTITUTE

12 West Coast Walk #02-14 & 02-17/17A, West Coast Recreation Ctr, S'pore 127157
Tel: 6467 4225 Fax: 6467 4226 Email: enquiries@sqi.org.sg Website: www.sqi.org.sg
ROS Ref No: ROS 245/1970 TAP GST Reg No: M90010688N

CERTIFIED GD&T ENGINEER (CGDTE)

COURSE OBJECTIVE

This certified course is been designed to address the above concerns. It covers both the breadth and the depth of functional dimensioning and exposes the participants vigorously to practical issues. It has been tailored to build proficiency in key and crucial functional dimensioning areas, including :

1. Practical CMM measurement of functional dimensioning,
2. Day-to-day real life interpretation of functional dimensioning drawings in a company,
3. Part qualifications, first article inspections, proper tabulation of functional dimensioning inspection reports.
4. Addressing practical management and implementation issues in functional dimensioning within a company,
5. Real life functional dimensional analysis that involves complex assembly stack

COURSE CONTENTS

MODULE 1: QUALITY PRACTICES & APPLICATIONS

- Quality Systems & Standards
- Product, Process & Materials Control
- Cost of Quality
- Quality Planning & Management

MODULE 2: GEOMETRIC DIMENSIONING & TOLERANCING

- Introduction to GD&T
- Essential Concepts
- Feature Datums, Feature of Size, Datums & Applications
- Form Control & Applications
- Orientation Control & Applications
- Position and Symmetry Controls
- Runout and oncentricity Controls
- Profile Controls

MODULE 3: GD&T STACK ANALYSIS

- Introduction Components Stack Analysis
- Assembly Stack Analysis
- Concentricity and Runout Tolerance Analysis
- Profile Tolerance Analysis
- Position Tolerance Analysis - Components
- Position Tolerance Analysis - Assembly
- Orientation & Form Tolerance Analysis

MODULE 4: ADVANCED GD&T

- The Major Principles in Advanced GD&T
- Tolerancing Mating Parts in a Rotating Assembly – Learnt while – Doing Training Session
- Direct Versus Indirect Datum Structures
- Allowed vs Actual Deviation from True Position – Bonus Tolerancing & Virtual Condition Boundaries
- Profile, Flexible Parts and Datum Targets



Certificate No: 6655731205



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- Tolerancing Complex Assemblies with Multi-Level Functional Controls & Varying Datum Structures

MODULE 5: PRACTICAL SESSIONS & MINI PROJECTS (USING COMPANY DRAWING & PRODUCTS)

- Practical CMM Measurement of GD&T, Part Qualifications, First Article Inspection, Proper Tabulation of Functional Dimensioning Inspection Reports
- Day-to-Day Real Life Interpretation of GD&T Drawing in a Company & Real Life Functional Dimensional Analysis of Company Products and Drawings

HAND-ON EXERCISES USING COMPANY'S DRAWING

Participants will be able to understand drawings with GD & T symbols. Case studies and hands-on exercises using specially selected drawings allow participants to use and apply the information learnt in the course. Participants may also bring company drawings for interpretation during live case studies.

WHO SHOULD ATTEND

This certified course is designed for engineers who needs knowledge in functional dimensioning applications and hands-on exercises using your company's drawing allows you to actually use and apply your newly acquired knowledge to your work – the most efficient way to learnt.

ENTRY REQUIREMENTS

A diploma or degree with at least 3 years working experience in the quality field.

COURSE DURATION

Full Package : 5 modules
30 Lessons over 5 Months (Lesson from 07:00pm – 10:00pm daily).

COURSE FEES

S\$3,274.20 (SQI Member) S\$3,923.70 (Non-Member) *Fees inclusive of 7% GST*
Course fees include training materials, exam fee & certificate

TRAINING VENUE:

SQI, 12 West Coast Recreation Walk #02-17, West Coast Recreation Centre, Singapore 127157

RESERVATION:

Call Jeffrey Tan @ Mobile: 9272 4683, Tel: 6467 4225 or Email: jeffreytan@sqi.org.sg



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