



ESCI

Engineering Staff College of India

Autonomous Organ of The Institution of Engineers (India)

Old Bombay Road, Gachibowli, Hyderabad – 500 032. TS, India



MANAGEMENT & TECHNOLOGY DIVISION

Continuing Professional Development Programme on
**Non – Destructive Testing and Failure Analysis of Castings,
Forgings, Weldments and Tubes**
16 - 20 December 2019



(An ISO 9001:2015 Certified, AICTE & CEA Recognized Institution)

Centre for Promotion of Professional Excellence

INTRODUCTION

Non-destructive Testing is a bridge between design and production and it has become a most versatile tool to assess quality of components and to ensure their reliability in service. The increasing applications of Non-Destructive Testing Methods necessitate that the tests and evaluation of components are conducted by competent personnel ensuring uniformity of practice and soundness of technical approach.

The competence of personnel involved can only be ensured by exposing them to a systematic training in the science and practice of non-destructive evaluation. In view of the multi-disciplined back ground and varying experience of entrants to the field of NDT, the course has been developed from fundamentals through advanced.

OBJECTIVE

The objective of the programme is to provide a practical insight into the various aspects of NDT and to update the knowledge of personnel working with manufacturing and process industries, automobile, defence, aeronautical or aerospace, ordnance factories, public & private sectors enterprises.

COURSE COVERAGE

- Overview of NDT Methods in identifying defects in Welds, Castings, Forgings and Tubes
- Failure Analysis of Castings, Forgings, Weldments and Tubes
- Ultrasonic Testing & Developments
- Real time and Digital Radiography of Welds and castings
- Eddy Current Testing
- Liquid Penetrant Testing & Magnetic Particle Testing
- Industrial Computed Tomography
- Electromagnetic Techniques for Residual Stress Measurement
- Acceptance Standards for Castings, Forgings, Welds, and Tubes
- NDE in Failure Analysis with Case studies on failures related to defects in
 - Casting
 - Forging
 - Welds
 - Systems

METHODOLOGY

Methodology of the programme includes class room Sessions with Lecture/discussion with audio visual aid, benched marked video shows, Chalk & Talk sessions, group discussions, case studies, debates, sharing of experiences, etc. All the sessions will be interactive demanding active participation from all the members. CMI will be the main method of instruction.

FACULTY

Besides ESCI faculty, experts from industry, research establishments and academia will be involved.

TARGET PARTICIPANTS

Senior engineering executives and engineering managers working in quality control, quality assurance, design, production, process planning areas in manufacturing and process industries, automobile, defence, aeronautical, ordnance factories, public & private sectors enterprises will be highly benefited by attending the programme

BENEFIT TO THE PARTICIPANTS.

- a) Exposure to various NDT Techniques in vogue.
- b) An understanding of the benefits and drawbacks of each form of nondestructive examination can help participant to choose the best method for his specific application.
- c) Programme will provide a platform to the participants to share and enrich his experience with the galaxy of Experts either participating or coming as guest speakers during sessions.
- d) Opportunity to have practical exposure during Technical visit to prestigious establishment.
- e) Opportunity to present his case study in case found suitable.
- f) Awareness on Certification schemes NDT Levels.

Programme Venue, Dates & Timings

Venue: Engineering Staff College of India (ESCI) Campus, Old Bombay Road, Gachibowli, Hyderabad. 500032. Telangana, India.

Dates:

16-20 December 2019

Timings

On the first day Registration will commence at 09.00 h i.e. 17 December 2018. On all other days the programme timings will be from 09.45-17.15 Hrs with breaks in between for tea and lunch.

COURSE DIRECTOR

Gp. Capt. (Retd.) BS Phillora BE (ETC), AE (L), MMS (DS), M Phil, FIE, Certified Lead Auditor
**Dean of Studies &
Sr. Faculty & HoD Management & Technology Division ESCI**

COURSE FEE

₹ 25,500/- (**Residential Fee**) per participant. Fee includes, course material, course kit, twin-sharing AC accommodation as per availability, breakfast, lunch, dinner, tea / coffee and snacks during the actual days of training programme.

DISCOUNTS

- **Non-Residential Fee-** 10% discount on course fee is allowed for non-residential participants.
- **Group Discount:** Additional 10% discount for 03 or more participants, if sponsored by the same organization.

(All discounts are applicable only if fee is received at ESCI before the commencement of the programme.)

Goods and Service Tax @ 18% is to be paid extra over and above the training fee. PAN Card No AAATT3439Q; **GST No. 36AAATT3439Q1ZV.** (Under commercial training or coaching services).

Programme fee is to be paid in favour of “**IE (I)-Engineering Staff College of India**” in the form of demand draft payable at Hyderabad at par cheques payable at any Bank Branches.

Alternatively, the payment may be made by Electronic Fund Transfer (EFT) to ESCI - **SB A/c No.0432104000039631 with The IDBI Bank Ltd., Gachibowli Branch, Plot No. 2-53/2, JNIBF, IIIT Junction, Gachi Bowli, Hyderabad-500032 by RTG's/ NIFT / IFSC Code No: IBKL0000432. ESCI PAN No. is AAATT3439Q.** While using EFT/ Draft method of payment, kindly forward a covering letter giving details on the names of the participants, Title and the programme schedule so that proper accounting can be done.

REGISTRATION

Online registration shall be available on ESCI website. URL: www.escihyd.org (Domain Management & Technology).

To register, manually please send your nominations giving details of name, designation, contact address, email address, mobiles no, telephone and fax number of the participant along with the details of mode of payment of fee, addressed to:

The Head,
Management & Technology Division
Engineering Staff College of India
Old Bombay Road, Gachibowli, Hyderabad 500 032
Phone : 040 6630 4111/6630 4112 & 6630 4105
Fax : 04066304103 & 914030995227
Email : mt@escihyd.org

CERTIFICATION

A certificate of participation will be awarded to each participant on conclusion of the programme.

GENERAL INFORMATION

- ESCI encourages participants to present case studies from their respective organizations.
- ESCI provides complimentary accommodation and boarding to the participants one day before commencement (Check-in 1200 h) and one day after conclusion (Check-out 1200 h) of the programme duration. Overstay charges will be applicable as per ESCI rules (subject to availability of accommodation)
- Well-developed Information Centre and Internet facilities are available to the participants
- **Nominating authorities are requested to kindly send the contact details of the participants while sending their nomination letter. This will help us in making necessary administrative arrangement for them.**