Metals Industry Research and Development Center
SEMINAR SCHEDULE
January – December 2025

FACE-TO-FACE PROGRAMS

ANALYSIS AND TESTING

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Dimensional Metrology 1- **Basic Measurement** **(24 hours)** Discusses the history of metrology, the basic concept of measurement that focuses on its uncertainty, the various applications of the different length measuring equipment, and provide the necessary knowledge and skills in proper handling and maintenance of different measuring instruments.	February 12-14 August 13-15 October 8-10 Wednesday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 5,800.00**
Dimensional Metrology 2- **Basic Length Calibration** **(Prerequisite: DM1-Basic Measurement)** **(24 hours)** Discusses the calibration, the traceability concepts, the general requirements for calibration, and actual application using different instruments.	June 25-27 Wednesday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 5,800.00**
Uncertainty of Measurement- **Length Calibration Application** **(Prerequisite: DM2- Basic Length Calibration)** **(16 hours)** Discusses the uncertainty of measurement in length calibration based on NATA Assessment of Uncertainties of Measurement (with reference to ISO-GUM), the application of corrections, and the expression of Uncertainty of Calibration Report.	October 30-31 Thursday - Friday 8:00 a.m. - 5:00 p.m.	**PhP 4,000.00**
Metals Identification & Selection **(16 hours)** Discusses the different properties of metals, classification and uses of ferrous and non-ferrous metals, and pointers on metal selection.	March 20-21 July 3-4 October 2-3 Thursday -Friday 8:00 a.m. - 5:00 p.m.	**PhP 4,000.00**

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Metals Industry Research and Development Center
SEMINAR SCHEDULE
January – December 2025

ANALYSIS AND TESTING

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Nondestructive Testing **(40 hours)** Discusses the liquid penetrant testing, magnetic particle inspection, radiography, and ultrasonic testing methods.	March 24-28 November 17-21 Monday-Friday 8:00 a.m. – 5:00 p.m.	**PhP 8,400.00**
Introduction to Advanced Ultrasonic Testing (Phased-Array Ultrasonic Testing-PAUT) **(18 hours)** Discusses the difference between conventional and advanced ultrasonic testing (PAUT), principle of PAUT, different basic techniques used in PAUT and perform basic calibration PAUT.	February 26-28 Wednesday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 7,000.00**

ENGINEERING, PRODUCTION AND PLANNING

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Module 2: The Extent and Opportunities of Production and Operations Management: Its Functions and Scope **(18 hours)** Discusses the various functions in the Production and Operations Management and its scope.	September 17-19 Wed-Friday 9:00 a.m. – 4:00 p.m.	**PhP 2,500.00**
Establishment of Preventive Maintenance System **(20 hours)** Discusses the principles, techniques, strategies, and steps in establishing preventive maintenance program and Computerized Maintenance Management System (CMMS).	March 5-7 July 2-4 November 5-7 Wednesday-Thursday 9:00 a.m. – 4:00 p.m. & Friday 8:00 a.m. - 5:00 p.m.	**PhP 4,500.00**

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Metals Industry Research and Development Center
SEMINAR SCHEDULE
January – December 2025

ENGINEERING, PRODUCTION AND PLANNING

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Product Costing **(16 hours)** Discusses the basic cost concepts, ways of cost classification, types of product costing system, and the preparation of standard cost for specific products.	March 20-21 October 16-17 Thursday-Friday 8:00 a.m. – 5:00 p.m.	**PhP 4,000.00**
Production Planning & Control **(18 hours)** Discusses the role of PPC in an industrial firm, its principles, importance and various functions.	May 21-23 September 10-12 Wednesday-Friday 9:00 a.m. – 4:00 p.m.	**PhP 4,500.00**
Cost Estimation for Machining Jobs **(18 hours)** Discusses the basic preparation of Cost Estimation of simple machine products and determine the elements of costs and standard rates.	February 19-21 August 6-8 Wednesday-Friday 9:00 a.m. – 4:00 p.m.	**PhP 4,200.00**
AC/DC Electricity on Automation Technology **(24 hours)** Discusses the AC/DC Electricity principles, interpretation about Electrical Schematics and design, and creation of Electrical Logic Circuits - its performace and operation with Input and Output Devices.	May 28-30 Wednesday-Friday 8:00 a.m. – 5:00 p.m.	**PhP 4,500.00**

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SEMINAR SCHEDULE
January – December 2025

HIGH MACHINING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
NX CAD Fundamental Course **(40 hours)** Discusses the fundamentals of CAD. Covers 2D sketch, 3D design, design feature, associative copy/Geometry, Offset/Scale, detail feature of design.	September 22-26 Monday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 9,000.00**
Application of CAD/CAM **(Computer-Aided Design/Computer-Aided Manufacturing)** **(40 hours)** Discusses design using CAM software, the steps in importing drawings to CAM from AutoCAD software, the process in creating surfaces, tool path, and interface edited tool path using MAZAK Vertical Machining Center and Mastercam V.8.1	March 17-21 Monday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 9,600.00**
Fundamentals of Gear Hobbing Operation **(24 hours)** Discusses the Fundamentals of Gear Making, and gear hobbing operation.	May 6-9 Tuesday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 11,750.00**
Plastic Injection Molding Machine Programming & Operation **(40 hours)** Discusses plastic injection molding process using the SUMITOMO Plastic Injection Molding Machine and its operation.	March 17-21 Monday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 8,900.00**
CNC Milling Programming & Operation **(38 hours)** Discusses the operation and programming of CNC milling machines, coding and encoding of programs using G-codes, M-codes.	February 17-21 August 4-8 October 20-24 Monday 9:00 a.m. - 4:00 p.m. & Tuesday- Friday 8:00 a.m. - 5:00 p.m.	**PhP 10,200.00**

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SEMINAR SCHEDULE
January – December 2025

HIGH MACHINING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
CNC EDM Sinking Programming & Operation (40 hours) Discusses the EDM Sinking process, and the functions of Die Electric Fluid and EDM Sinker Electrode.	January 20-24 Monday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 9,600.00**
CNC EDM Wire Cutting, Programming & Operation (40 hours) Discusses the process in creating CNC-Wire Cutting EDM program, and the different types of wires and materials use in CNC-EDM Wire Cutting machine.	March 3-7 Monday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 9,600.00**

MANAGEMENT AND PRODUCTIVITY IMPROVEMENT PROGRAM

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Value Analysis/ Value Engineering I (38 hours) Discusses the improvement of cost consciousness throughout the organization through an application of a systematic, and team approach of an effective cost reduction in both product and service.	November 17-21 Monday 9:00 a.m.- 4:00 p.m. & Tuesday - Friday 8:00 a.m.- 5:00 p.m.	**PhP 8,000.00**

METALWORKING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Metal Fabrication (30 hours) Discusses the fabrication processes applied to fabricate metal products, and the typical fabrication materials used.	January 20-24 April 21-25 Monday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 8,200.00**

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SEMINAR SCHEDULE
January – December 2025

METALWORKING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Heat Treatment of Steels **(30 hours)** Discusses the different heat treatment processes of steel, i.e. annealing, normalizing, spheroidizing, tempering, stress relieving, direct hardening, carburizing, carbonitriding, tufftriding and flame hardening.	February 24-28 May 19-23 September 8-12 Monday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 7,400.00**
Machine Shop Operations **(40 hours)** Discusses the fundamentals of turning, milling and grinding machines. It also includes explanation of cutting tool materials, care and maintenance of related tools and equipment.	January 20-24 May 12-16 September 15-19 Monday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 10,600.00**
Shielded Metal Arc Welding (SMAW) **(24 hours)** Dicsusses the welding of metals in different positions and welding joints, common problems, causes and remedies in SMAW operation, knowledge of properties of metals & use of personal protective equipment as a standard working procedure.	February 18-21 November 11-14 Tuesday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 9,000.00**
GMAW/MIG-MAG Welding on Carbon Steel Plates – Module I **(30 hours)** Provides knowledge and skills in MIG/MAG process, principle, advantages, limitation, techniques, causes and prevention of discontinuities encountered.	March 10-14 Monday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 12,100.00**
TIG Welding on Carbon Steel Plates-Module I **(30 hours)** Provides knowledge and skills in TIG process, principle, advantages, limitation, techniques, causes and prevention of discontinuities encountered.	April 21-25 Monday –Friday 9:00 a.m. - 4:00 p.m.	**PhP 13,800.00**

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SEMINAR SCHEDULE
January – December 2025

METALWORKING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
3D Printing of High Performance Polymers (Filament-Based) **(12 hours)** Discusses the High Performance Polymers used on Fused Filament Fabrication (FFF), its applications, common operational issues, the process of basic calibration procedures using INTAMSYS FUNMAT PRO 410 3D printer, and how the machine prints.	May 8-9 Thursday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 10,400.00**
Training on 3D Printing: Fused Granulate Fabrication (Pellet-Based) **(14 hours)** Discusses the concept of Fused Granulate Fabrication (FGF), the materials used in FGF and its applcaitions, the process of basic operations, basic maintenance and trobleshooting of the 3D printer (Gigabot X XLT), and how the machine prints.	June 26-27 Thursday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 5,900.00**
Training on 3D Printing: Stereolithography **(12 hours)** Dicsusses the basic concept of 3D printing, Stereolithography Apparatus (SLA), the process of basic operations of an SLA printer (FormLabs Form 2), how the machine prints, and post-processing methods used in resin-based prints.	July 3-4 Tuesday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 4,800.00**
Training on 3D Printing: Filament-Based for Towering Components **(16 hours)** Discusses the fundamentals of Fused Filament Fabrication (FFF) technology, the parts of Leapfrog Xcel printer, materials used in the machine and its applications, the machine's slicing process, and how the machine prints.	August 7-8 Thursday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 7,600.00**

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Metals Industry Research and Development Center
SEMINAR SCHEDULE
January – December 2025

METALWORKING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Training on 3D Printing: Filament-Based Dual Extruder **(16 hours)** Discusses the Additive Manufacturing (3D Printing), the processes of Fused Filament Fabrication (FFF), Dual Extrusion 3d Printer, Slicing Using UltiMaker Cura, and UltiMaker S5, and the machine prints.	April 3-4 Thursday –Friday 8:00 a.m. - 5:00 p.m.	**PhP 3,500.00**

QUALITY MANAGEMENT SYSTEM

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Customer Satisfaction Measurement **(16 hours)** Discusses the fundamental concept of customer satisfaction measurement through statistical analysis and interpretation of survey data.	March 27-28 Thursday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 4,000.00**
Awareness Seminar on ISO 9001:2015 **(8 hours)** Discusses the eight (8) Management Principles and the highlights of the ISO 9001:2015 standard.	March 7 Friday 8:00 a.m. - 5:00 p.m.	**PhP 2,500.00**
Internal Quality Audit **(24 hours)** Discusses the importance of internal quality audit as a tool in identifying improvement opportunities in the QMS; interpret requirements of ISO 9001 in the context of audit; describe the roles and responsibilities of internal auditors; and, the process of conducting an audit in accordance with ISO 19011:2018 Standard.	May 21-23 Wednesday-Friday 8:00 a.m. - 5:00 p.m.	**PhP 6,300.00**
Awareness on Risk Management **(Based on ISO 31000:2018)** **(8 hours)** Discusses the Risk Management Principles, Risk Management Framework and Process, Risk Assessment, Risk Treatment Techniques, and the preparation of Risk report.	April 11 Friday 8:00 a.m. - 5:00 p.m.	**PhP 2,500.00**

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Metals Industry Research and Development Center
SEMINAR SCHEDULE
January – December 2025

QUALITY MANAGEMENT SYSTEM

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Effective Skills for Audit Reporting **(8 hours)** Discusses the ISO 9001:2015 Quality Management System requirements in the context of an audit, the audit findings according to its classifications using the specifics and basic expressions in writing a nonconformity (NC) and opportunities for improvement (OFI) report.	February 7 Friday 8:00 a.m. - 5:00 p.m.	**PhP 2,500.00**
Root Cause Analysis **(16 hours)** Discusses the application of various Root Cause Analysis techniques for continual improvement.	May 15-16 Thursday-Friday 8:00 a.m. – 5:00 p.m.	**PhP 5,000.00**
5s in Action **(12 hours)** Discusses the Lean Management specifically Gemba Walk approach, the 5S practice, the preparation of assessments and reports using the Gemba Walk technique, and the process on how to carry out the 3S of 5S practice.	June 26-27 Thursday-Friday 9:00 a.m. - 4:00 p.m.	**PhP 4,200.00**

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SEMINAR SCHEDULE
January – December 2025

ON-LINE PROGRAMS

ANALYSIS AND TESTING

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Industrial Calibration **(9 hours)** Discusses the calibration principles and the procedures on pressure, temperature, and mass.	May 15-16 August 7-8 Thurs-Friday 9:00 a.m. – 3:30 p.m.	**PhP 3,000.00**

ENGINEERING, PRODUCTION AND PLANNING

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Module 1: Overview of Production and Operations Management **(6 hours)** Discusses the Production and Operations Management, Service Operations, Manufacturing Operations, and the differenct approaches for managing operations.	August 8 Friday 9:00 a.m. – 4:00 p.m.	**PhP 1,000.00**

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Metals Industry Research and Development Center
SEMINAR SCHEDULE
January – December 2025

METALWORKING TECHNOLOGY

Title of Program /Duration/Course Description	Schedules/ Day/Time	Seminar Fee
Geometric Imperfections in Metallic Materials for Fusion Welding **(3 hours)** Discusses imperfections, differentiate imperfection from defect; identify ISO Number System Classification of Imperfections and its designation.	July 4 Friday 9:00 a.m. - 12:00 n.n.	**PhP 400.00**
Module 1: Introduction to Metal Fabrication (Metal Fabrication) **(3 hours)** Discusses Metal Fabrication in general, the typical steel fabrication materials in the industry, and common fabrication processes.	May 16 Friday 9:00 a.m. - 12:00 n.n.	**PhP 400.00**
Pneumatics and Hydraulic System Designs **(3 hours)** Discusses the basics of Pneumatics and Hydraulic system designs.	August 29 Friday 9:00 a.m. - 12:00 n.n.	**PhP 400.00**

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January – December 2025

Other Training Programs Offered

- *Basic CAD*
- *Basic Coordinate Measuring Machine (CMM) Operation*
- *Basic Plastic Injection Mold Design*
- *Brazing Process (Copper and Other Metals)*
- *Chemical Analysis of Metal*
- *CNC Lathe Programming and Operations*
- *Copy Milling and Pantographing*
- *Developing and Implementing a Laboratory QMS Based on ISO/IEC 17025:2017*
- *Documenting a QMS Based on ISO 9001:2015 Standard*
- *Electroplating Processes*
- *Factors Essential to Ensure Quality of Welding Framework*
- *Feasibility Study Preparation*
- *Foundry Casting Defects and Remedies*
- *Foundry Casting Design*
- *Foundry Melting Practices*
- *Foundry Patternmaking*
- *Foundry Practices*
- *Foundry Quality Control*
- *Fundamentals of Corrosion*
- *Gemstone Processing*
- *Investment Casting*
- *Metal Casting Cost Estimation*
- *Molding, Sand, Properties and Control*
- *Oxyacetylene Welding (OAW)*
- *Productivity Improvement through 5S Practices*
- *Project Management*
- *Root Cause Analysis*
- *Supervisory Control and Data Acquisition*
- *Smithery*
- *Spin Casting*
- *Supervisory Development*
- *Technical Drawing*
- *Technical Drawing using CAD*
- *TTP1: Effective Presentation Skills*
- *TTP2: Curriculum Development Process*
- *TTP3: Organization and Mgt. of a Training Program*
- *TTP4: Moderating and Facilitating Techniques*
- *Turning I*
- *Verification of Common Laboratory Instruments*

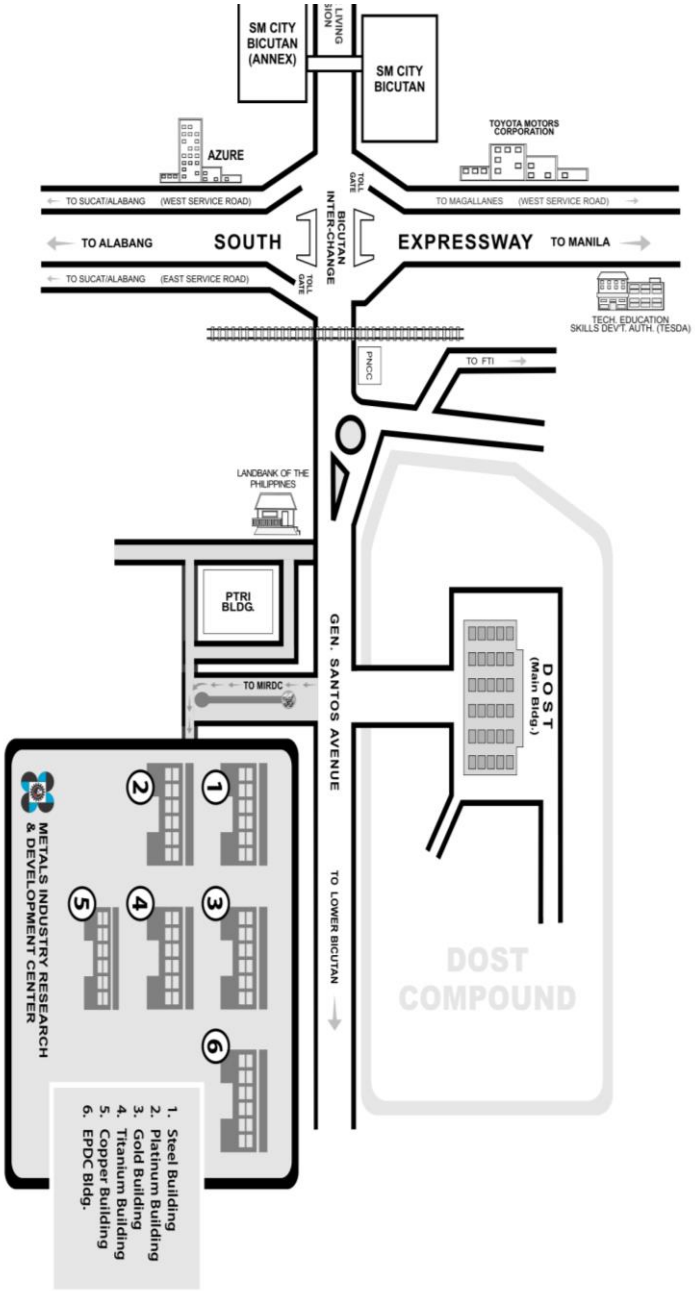
Notes

- *MIRDC also designs programs suited to your training needs.*
- *Training programs can also be accommodated in-house*
- *For reservations, fill out the attached Reservation Form and send it through fax or through e-mail*
- *On-line reservation is also available*

Accreditation/Certification

- *ISO 9001:2015 Certified*
- *ISO/IEC 17025 Accredited*
- *Civil Service Commission (CSC) Accredited Government Institution (GTI-00503-0594)*

Location Map



For more information, write or call:

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