



THE INSTITUTE OF MARINE ENGINEERS (I), Mumbai Branch

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VIKING MARITIME TRAINING INSTITUTE, Navi Mumbai



VIKING MARITIME TRAINING INSTITUTE

Instrumentation & Automation Course for Marine 3rd/Eng, 2nd/Eng, Ch/Eng & ETO.

Course Starts From 10th June to 14th June 2024

<p>Intrumentation</p> <ul style="list-style-type: none"> • Demo of various primary sensors and their outputs • Demo of Conversion of primary sensor output to standard signals • Demo of 4 to 20 mA loop current reading by various methods • Demo of Instrument calibration, of Analogue signal conditioners • Interactive and Non Interactive Instrument calibration • Digital DP Cell calibration, Boiler water level sensor calibration • Analogue & Digital Signals explanation and demonstration • Demo of Sensor Readings on computer screen on SCADA, SCADA set up 	<p>Process Control Engineering</p> <ul style="list-style-type: none"> • Demo of open loop response of a controller to input changes • Demo of Proportional, Integral & Derivative Actions • Demo of 3-15 psi actuator, Reverse and Direct acting concepts of actuator and valve. • Demo of I/P Converter calibration • Demo of Pneumatic Valve Positioner calibration • Demo of TISSIN-800 Digital valve positioner initialization • Pneumatic, Electro Pneumatic, Digital, PLC, PID Controllers • Use of Digital storage Oscilloscope • Use of Electronic Governor and Acctuator for speed control of Generator
<p>PLC / HMI</p> <ul style="list-style-type: none"> • Demo of "Input" & "Output", Digital & Analogue of PLC System • Demo of Ladder Logic programming, uploading and downloading • Demo of HMI programming, uploading and downloading • Demonstration of Systematic trouble shooting of a relatively large PLC system 	<p>Encoders, Proximity Sensors & Retentive Timers</p> <ul style="list-style-type: none"> • Demo of Incremental Optical & Mechanical Encoders • Demo of Absolute Optical Encoders • PNP & NPN Inductive Proximity Sensors
<p>VFD</p> <ul style="list-style-type: none"> • Demo of a running VFD with encoder feed back • Demo Parameters setting of a VFD • Use of VFD to control the flow pressure 	<p>Machine Communication</p> <ul style="list-style-type: none"> • Standards, Cables, Connectors and Protocols of communication • Use of HART Communicator • IC 8051 Microprocessor Trainer
<p>PLC Based Boiler Firing Sequence Simulator</p> <ul style="list-style-type: none"> • Training of Boiler Firing Sequence • Ladder logic programming for adjusting the timing of the sequence 	<p>Level and Flow Simulator</p> <ul style="list-style-type: none"> • Training of Rotameter , Positive Displacement FLOW METER, Differential Pressure , LEVEL INDICATOR • Demonstration of Boiler Drum Level Low-Low Level Alarm • PC and PID Controller based Level and Flow control , with past trends and current graphs level

<p style="text-align: center;">Fees :</p> <p>*Members - Rs. 40000/- + 18 % GST (IMEI, CMMI and INA Members)</p> <p>*Non Members - Rs. 45000/- + 18% GST</p>	<p>Course Start Date : 10th June to 14th June 2024</p> <p>Timing : 9 am to 5 pm daily</p> <p>Venue : Offline courses at VMTI, CBD Belapur, Navi Mumbai</p> <p>*Attendance on all days is compulsory</p>
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Accommodation can be arranged by VMTI near the premises starting @ Rs. 500/- per day (inclusive of breakfast). Kindly confirm requirement at the time of enrollment.

Lunch and evening tea will be provided at the venue

Dinner to be managed by the students.

Venue : 419, Skylark, Sector-11, Near B. P. Marine Academy, CBD Belapur, Navi Mumbai

Kindly enroll & make payment through <https://linktr.ee/imei.m>

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After registration, kindly drop an email to training_mumbai@imare.in

Contact Person for any queries:-

Ms. Anita Patill: +91-7350002757 , +91-9225516456 Ms. Neetha Nair: 91-9930977647

Faculty Name : Mr. Kishore Khopkar , B.E.(Elect.)

Ex - Sr. Faculty for Marine Automation, Control Engineering and Electronics for Six Years at A.E.M.A., Karjat, and previous 30 Years of Sea and as Marine Superintendent Experience.