

# International Training Courses

## CIAST Brochure



CIAST is located in Shah Alam, the state capital of Selangor which is also known as the 'Orchid City' of Malaysia

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CIAST conducting various courses for participants from other vocational training institutes, domestic industries and international countries

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## About Malaysia

To know Malaysia is to love Malaysia – a bubbling, bustling melting-pot of races and religions where Malays, Indian, Chinese and many other ethnic groups live together in peace and harmony. Our multiculturalism has made Malaysia a gastronomic paradise and home to hundreds of colourful festivals. It's no wonder that we love celebrating and socialising. As a people, Malaysian are very relaxed, warm and friendly.

Geographically, Malaysia is almost as diverse as its culture. 11 states and 2 federal territories (Kuala Lumpur and Putrajaya) form Peninsular Malaysia which is separated by the South China Sea from East Malaysia which includes the 2 states (Sabah and Sarawak on the Island of Borneo) and third federal territory, the Labuan Island.



One of Malaysia's key attraction is its extreme contrast which further add to this theme of 'diversity'. Towering skyscrapers look down upon wooden houses built on stilts while five-star hotels sit just metres away from the ancient reefs.

Rugged mountains reach dramatically for the sky while their rainforest-clad slopes sweep down to flood plains teeming with forest. Cool highland hideaways roll down to warm, sandy beaches and rich humid mangroves.

### Area



### POPULATION



### CAPITAL CITY



## Country



One of Malaysia's key attraction is its extreme contrast which further add to this theme of 'diversity'.



The federation of Malaysia comprises of Peninsular Malaysia and the states of Sabah and Sarawak on the island of Borneo.

In the northern part of Peninsular Malaysia lies Thailand and in the South, neighbouring Singapore. Sabah and Sarawak are bounded by Indonesia while Sarawak also shares borders with Brunei.

Situated between 2F and 7F to the North of the equator line, the Peninsular Malaysia is separated from Sabah and Sarawak by the South China Sea.



# Meet The PEOPLE



The monetary unit of the country is Ringgit Malaysia written as RM or MYR.

Notes are available in RM1, RM5, RM10, RM20, and RM100 denominations, while coins are issued in 5, 10, 20 and 50 cents denomination.

View the latest exchange rates here [www.xe.com](http://www.xe.com)

## CURRENCY

The country experiences tropical weather year round. Temperature range from 21C (59F) to 32C (77F)

Annual rainfall varies from 2000mm to 2500mm. However, the wettest part of Malaysia could well be the hill slopes of Sarawak inland areas, which receive a mean annual rainfall exceeding 5,000 mm.



## WEATHER

“ Rugged mountains reach dramatically for the sky while their rainforest-clad slopes sweep down to flood plains teeming with forest. Cool highland hideaways roll down to warm, sandy beaches and rich humid mangroves ”



Eight hours ahead of GMT and 16 hours ahead of U.S Standard Time

## TIME

Voltage is 220-240 Volt AC at 50 cycles per second. Malaysia uses standard 3-pin square plugs and socket.



## ELECTRICITY

\*Source from Tourism Malaysia Website.

# PEOPLE AND LANGUAGE

Malays comprise 57% of the population while the Chinese, Indian and Bumiputeras and other races make up the rest of the country’s population. Malay is the national language the many ethnic groups also converse in the various languages and dialects but English is widely spoken.

Islam is the official religion of the country, but other religions such as Buddhism, Hinduism and Christianity are widely and freely practised.

# Introduction



CIASST is an acronym for the Centre for Instructor and Advanced Skill Training. CIASST is the forefront institute in the Ministry of Human Resources and one of the leading organizations in development and enhancement trainers of skill training in Malaysia. The idea of CIASST was first mooted by the Malaysian Government in 1979.

Following a joint feasibility study, the construction of CIASST was completed by 1983, with financial assistance from the Japanese Government under the ASEAN Human Resources

Development project and assisted by the technical and management experts via JICA until 1991.

CIASST conducting various courses for participants from other vocational training institutes, domestic industries and international countries and this has been a tradition with the Ministry where human resources are the biggest and most important asset. The centre offers courses in instructor training, supervisory training and advanced skill training for skills instructors, industrial supervisors and coaches and industrial skilled workers from the private and public sectors as well as

international level.

Training programs at the centre were conducted by experienced instructors with various technical backgrounds.

Since 1988, CIASST has conducted 97 international courses with 1028 participants. CIASST is located in Shah Alam, the state capital of Selangor which is also known as the ‘Orchid City’ of Malaysia. It is 25 km away or about half an hour’s drive from Kuala Lumpur, the capital of Malaysia and about one hour’s drive from Kuala Lumpur International Airport (KLIA).

# Location

CIAST is located in Shah Alam, the state capital of Selangor which is also known as the 'Orchid City' of Malaysia. It is 25 km away or about half an hour's drive from Kuala Lumpur, the capital of Malaysia and about one hour's drive from Kuala Lumpur International Airport (KLIA)

**A** **Accommodation**  
Hostel accommodation is available at the Centre.



**B** **Cafeteria**  
Food and drinks may be purchased at the cafeteria.



**C** **Library**  
The library is equipped with a large number of books on industrial technology



**D** **Recreational Facilities**  
Facilities for tennis, basketball, badminton, etc., are available for all participants. The participants are encouraged to bring along their sports equipment.



**E** **Transportation**  
Bus, taxi and train services from Shah Alam to Kuala Lumpur and vice versa are available



# General Regulations

## How To Apply

Submit your programme proposal 6 months prior the programme dates to the following address:  
DIRECTOR  
Center for Instructor and Advanced Skills Training (CIAST)  
Jalan Petani 19/1, Section 19,  
40300 Shah Alam  
Malaysia.

## Age

Candidates should be at the age of 26 to 45 years old at the closing date of the application.

## Entry Requirement

Person seeking to enter Malaysia must be in possession of valid passport or other internationally recognized travel document and visa if required. Such passports or other travel documents must be valid for at least 6 months beyond the period of stay allowed in Malaysia. Travelers from certain countries in South America and Africa are required to produce the Yellow Fever Vaccination Certificate at the entry in Malaysia. For further information regarding the immigration procedures, you can directly contact :  
The Director Visa, Pass and Permit Division,  
Headquartes of Malaysia,  
Immigration Department,  
1st - 7th Floor (Podium)  
Block 2G4 Federal Government Administrative Centre,  
Precint 2, 62550 Putrajaya, Malaysia.

## Notification

Candidates will be notified once the entry process is done.



Visa &  
Vaccination

Successful participants are advised to arrange for their own visa and vaccination prior to their travel, in which the expenses to obtain such requirement should be borne by them. Successful participants are required to submit a colored photocopy of the first page of their valid passport to the program organizer for immigration processing.



## Medical and Dental Treatment

In order to participate in this program, candidates should be certified by the approved medical institution in your country. During the stays in Malaysia, all medical and dental expenses in government hospital / clinic will be beared by the Malaysian Government. Dental treatment however is **restricted to extraction and filling** which must be carried out in government hospitals/ clinic only.

## Attire

Male candidates are required to wear a formal attire (long-sleeved shirts with ties and tailored pants) while female candidates must dress in an appropriate office attire during the lectures. Any formal occasions, lounge suit or national costume is advisable.

## Fares

Expenditures such as visa and visa-related fees, airport tax/airport user's charge, transit insurance, excess luggage, travel tax, transit fees, domestic passenger terminal fees et cetera are borne by the recipients.

## Course Fees

Course Fee will be covered includes :

- i. Group Accident Insurance
- ii. Accomodations
- iii. Meal
- iv. Transportation (from airport to accomodation at CIAST)
- v. Training Expenses

## Target Group

Applicants are obliged to fulfill the following requirements:

1. Open to all Vocational Training Managers/Officers, Lecturers or Instructors related to the programme offered;
2. Have a knowledge and basic skill in computer application;
3. Have experience related to the field offered;
4. Possess a good English communication (writing and oral abilities);
5. In a good health pyshically and mentally. The applicants must submit his/her Medical Report along with the application form (Pregnant women is not allowed);
6. Candidates MUST comply the Malaysia Custom, Health and Quarantine Regulations;
7. Applicant MUST NOT a Color Blind; and
8. Priority will be given to the candidates of age 45 years and below

## Insurance

1. All candidates are covered under a Group Travel Insurance Policy arranged by the organiser during their stays in Malaysia (starts from the arrival until to the departure date);
2. The insurance does not cover any pre-existing conditions/illness or any outpatient medical/ dental treatment;

3. Candidates are personally liable for all medical expanses beyond what is covered by the Group Personal Accident Insurance Policy.
4. Due to the limitation of insurance coverage, candidates are advised to make their own arrangements to obtain adequate medical insurance coverage during their stays.
5. The cost for the insurance coverage is to be borne by the candidates or the government of participating country.

## Training Coordinators

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# LIST OF CIAST INTERNATIONAL TRAINING

1. Empowering Tvet Practitioner In Assessment Development Programme
2. Train the Trainer Programme Enhancement Towards IR 4.0
3. Competency Development For TVET Trainers
4. Master Trainer In Competency Development For TVET Trainers Using Cudbas
5. Instructional Digital Video
6. Attractive Multimedia Presentation
7. Multimedia Tools - Share, Collaborate & Communicate
8. Industrial Automation In TVET Training (Basic)
9. Industrial Automation In TVET Training (Intermediate)
10. High Performance Gas Welding
11. Welding Surface Quality Inspection
12. All Wheel Drive Preventive Maintenance And Service (Intermediate)
13. New System Approach In Vehicle Maintenance And Services
14. Industrial Electrical Wiring & Siemens Logo!
15. Application And Development Of PLC System (Electrical/Electronic)
16. Industrial Electrical Wiring & AC Motor Control Technology



3 Weeks



15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## EMPOWERING TVET PRACTITIONER IN ASSESSMENT DEVELOPMENT PROGRAMME



### Course Objectives:

Empowering TVET Practitioner in Assessment Development Programme is a course designed to develop teaching, learning activities and assessment tools to evaluate trainees performances based on the standard. This course will be held from 10 October 2019 to 27 October 2019.

### Course Outline:

This course teaches participants the knowledge and skills needed to:

Enable candidate to prepare assessment questions and documents.

Verify assessment documentation.

Analyze assessment result according to job specification requirement and standard operating procedures (SOP).

### Training Content:

#### Introduction to Knowledge Assessment

- Topics to be assessed
- The importance, advantage and outcome of assessment.
- Availability, capability and reliability of resources (machine, equipment and tools)

#### Introduction to Performance Assessment

- Interpret topics to be assessed
- Determine the learning objectives, purpose and duration of the assessment
- Determine the qualification of candidate
- Ensure availability, capability and reliability of resources (machine, equipment and tools)

#### Guide for Assessment Preparation

- Taxonomy Bloom
- Table of Specification (TOS)

#### Assessment Session Planning

- Acquiring assessment information
- Verifying assessment requirements
- Assessment Plan





3 Weeks



15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## TRAIN THE TRAINER PROGRAMME ENHANCEMENT TOWARDS IR 4.0



3 Weeks



15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## COMPETENCY DEVELOPMENT FOR TVET TRAINERS



### Course Objectives:

This course provides a structured framework with a set of activities to enable individuals to be certified as a trainer.

### Course Outline:

This course teaches participants the knowledge and skills needed to:

1. Determine Training Requirements
2. Design Training Course
3. Conduct Training
4. Conduct Training Evaluation

### Training Content:

#### *Determine Training Requirements*

- Define training needs;
- Obtain information on participants' background; and
- Ascertain information regarding legal provision, policy and standard requirements

#### *Design Training Course*

- Formulate learning outcomes;
- Develop training course outline;
- Select training methods; and
- Organize training resources

#### *Conduct Training*

- Prepare session plan;
- Set the learning stage;
- Deliver training contents; and
- Facilitate training session

### Course Objectives:

This course teaches participants the knowledge and skills needed to:

1. Introduce and promote CUDBAS techniques in Third World Countries
2. Give exposure on TVET competency management using CUDBAS techniques to the vocational trainers;
3. Enable participants to identify and analyse the gap competencies among instructors in each trade;
4. Enable participants to acquire knowledge and skills in planning and implementing the relevant courses/trainings for instructors based on their needs to improve their competencies,
5. Enable participants to identify "Right Training-Right Time-Right Trainer" concept;
6. Enhance the skills of instructors continuously (up-skilling training);

### Course Outline:

Competency Development for TVET Trainers is a competency management course designed to:

Provide participants with an understanding of competency development using CUDBAS concept

Enabling participants to acquire facilitation skills and techniques in CUDBAS.

### Training Content:

- CUDBAS Basic Concept and Terminology;
- Development of CUDBAS Chart;
- Development of Training Program;
- Development of Ability Map; and
- Development of Training Plan;
- Set the learning stage;
- Deliver training contents; and
- Facilitate training session





3 Weeks



15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



3 Weeks



10-15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## MASTER TRAINER IN COMPETENCY DEVELOPMENT FOR TVET TRAINERS USING CUDBAS



### Course Objectives:

This course teaches participants the knowledge and skills needed to:

1. Introduce and promoting CUDBAS techniques and advance competency management concept in Third World Countries
2. Enable participants to expose with TVET competency management using CUDBAS techniques for upgrading skill vocational trainers;
3. Enable participants to do consultation and analyse the gap competencies among instructors in each trade ;
4. Enable participants to design and manage training program for instructors based on their needs to improve their competencies;
5. Enable participants to analyse competency case study.

### Course Outline:

Master Trainer in Competency Development for TVET Trainers using CUDBAS is an advance competency management course designed to:

- Provide participants with advance CUDBAS Concept and to be certified as CUDBAS Leader; and
- Certified CUDBAS Leader capable to conduct CUDBAS Program and do consultation for TVET and industries

### Training Content:

- *CUDBAS Theory and Fundamentals;*
- *CUDBAS Instruction Method for CUDBAS Basic Course;*
- *CUDBAS Instruction Method for CUDBAS Introduction Seminar;*
- *CUDBAS Instruction Method for Company Support;*
- *CUDBAS Teaching Material; and*
- *Case Study - Analyze competencies achievement.*



## INSTRUCTIONAL DIGITAL VIDEO



### Course Objectives:

This course teaches participants the knowledge and skills needed to :

1. Understand the concept of instructional digital video production;
2. Produce storyboard and script;
3. Handling digital camera and accessories; and
4. Edit and publish digital video.

### Course Outline:

Digital Instructional Video is a technical course designed to prepare in a concise and compact manner to facilitate instructor with knowledge and hands-on experience for instructional video production. Focusing in teaching and learning video, participants will go through the complete cycle of digital video production process. This course will assist participant in producing diverse multimedia teaching materials in order to become effective instructor.





3 Weeks



10 - 15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## ATTRACTIVE MULTIMEDIA PRESENTATION



3 Weeks



15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## MULTIMEDIA TOOLS - SHARE, COLLABORATE & COMMUNICATE



### Course Objectives:

This course teaches participants the knowledge and skills needed to:

1. Create visual presentation through hands-on exercises;
2. Produce creative animated graphic video presentation; and
3. Competent with various latest multimedia presentation tool.

### Course Outline:

1. Attractive Multimedia Presentation is a technical course designed to :
2. Enable participants to acquire knowledge and skills in creating visual presentation using Prezi
3. Enable participants to produce creative animated graphic video using VideoScribe and Powtoon.

### Training Content:

- Produce visually enticing presentation with Prezi
- Produce interesting presentation with animated graphic by using VideoScribe
- Produce dynamic presentation video by using Powtoon

*\*\* Field visits are part of the programme whereby participants will visit couples of public / private institutions as well as industries in Malaysia the programme's objectives.*

### Course Objectives:

This course teaches participants the knowledge and skills needed to :

1. Convert Power Point presentation to an interactive courseware using e-learning authoring toolkit
2. Utilize multimedia web-based tools for on-line collaboration, sharing information and communication

### Course Outline:

1. Web-based Multimedia Tools is a technical course designed to :
2. Enable participants to acquire knowledge and skills in produce e-learning courseware using iSpring
3. Enable participants to use web-based multimedia tools using Blendspace, Padlet and Kahoot.

### Training Content:

- Convert Power Point presentation to an interactive courseware using iSpring;
- Collaborate, share information and communicate on-line by using Blendspace, Padlet and Kahoot.

*\*\* Field visits are part of the programme whereby participants will visit couples of public / private institutions as well as industries in Malaysia the programme's objectives.*





3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## INDUSTRIAL AUTOMATION IN TVET TRAINING (BASIC)



### Course Objectives:

This course is designed to meet the following objectives:

1. Provide participants with an understanding of the concept of Pneumatic System in industrial automation training module;
2. Enable participants to acquire knowledge and skills in Programming PLC for TVET training;
3. Enable participants to acquire knowledge and skills in Modular Production System (MPS);and
4. Enable participants to acquire knowledge and skills in Human Machine Interface (HMI).

### Course Outline:

Industrial Automation technology is a technical course designed to :

1. Provide participants with an understanding of the concept of Pneumatic System, Programmable Logic Controller, and Modular Production System in industries;
2. Enable participants to acquire knowledge

and skills in Pneumatic, PLC Programming; and

3. Enable participants to acquire knowledge and skills in Modular production system.

### Training Content:

- Introduction to Pure and Electro-Pneumatic;
- Install and wiring Pneumatic Diagram;
- Develop PLC programming (Ladder Diagram And Sequential Function Chart);
- Install and wiring PLC;
- Integrate and assemble MPS;
- Develop HMI programming;and
- Interface HMI to MPS.

*\*\* Field visits are part of the programme whereby participants will visit couples of public / private institutions as well as industries in Malaysia the programme's objectives.*



## INDUSTRIAL AUTOMATION IN TVET TRAINING (INTERMEDIATE)



This course is designed to meet the following objectives:

1. Provide participants with an understanding of the concept of Pneumatic System in industrial automation training module;
2. Enable participants to acquire knowledge and skills in Programming PLC for TVET training;
3. Enable participants to acquire knowledge and skills in Modular Production System (MPS) SMAT Station;
4. Enable participants to acquire knowledge and skills in Modular Production System (MPS) Sorting Station; and
5. Enable participants to acquire knowledge and skills in Device Communication

Industrial Automation In TVET Training (Intermediate) is a technical course designed to prepare in a concise and compact manner to facilitate the automation system in TVET training such as PLC, Modular Production System (MPS) and Devices Communication.

### Training Content:

- Theories of MPS (SMAT and Sorting);
- Assemble MPS (SMAT and Sorting);
- Develop PLC programming (Sequential Function Chart);
- Install and wiring PLC ;and
- Devices Communication.
- Field visits are part of the programme whereby participants will visit couples of public / private institutions as well as industries in Malaysia the programme's objectives.





3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## HIGH PERFORMANCE GAS WELDING



### Course Objectives:

This course is designed to meet the following objectives:

1. Weld on carbon steel pipe 2 inch (Sch 60- Sch 80 ) in 6G position with GTAW(Gas Metal Arc Welding) process;
2. Ensure safety in accordance with workshop requirement;
3. Expert to weld, especially 6G position according to current industries application in quality international code & standard.

### Course Outline:

High performance gas welding technical enhancement course designed to:

1. Provide participants with an understanding of the concept and achieve the skill in 6G position on GTAW process
2. Enable participants to acquire knowledge and skills in the high level position (6G)
3. Enable participants to acquire knowledge and skills in GTAW process
- 4.

### Training Content:

- *Theory on GTAW process in 6G position*
- *Weld Skills in 6G position*
- *Weld Step (Penetration, Hot pass, Capping)*
- *Acceptance Criteria in GTAW process.*
- *Field visits are part of the programme whereby participants will visit couples of public / private institutions as well as industries in Malaysia the programme's objectives.*



3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## WELDING SURFACE QUALITY INSPECTION



### Course Objectives:

This course teaches participants the knowledge and skills needed to :

1. Prepare a concise knowledge on welding related theories and applications;
2. To understand factors which influence the quality of fusion welds in steels;
3. To recognise characteristics of commonly used welding processes in relation to quality control;
4. Prepare a concise knowledge on welding discontinuities, defects and acceptance criterias related to welding qualities;
5. Perform Visual Inspection and generate reports based on CSWIP requirement;
6. Prepare a concise knowledge on surface inspection using Dye Penetrant Inspection method; and
7. Perform Dye Penetrant Testing and generate reports based on CSWIP requirement;

### Course Outline:

Welding Surface Quality Inspection is a technical course designed to :

1. Provide participants with an understanding of the concept of verifying welding quality through surface inspection using Visual Inspection (VI) and Dye Penetrant Inspection (DPI)
2. Enable participants to acquire knowledge and skills in inspect welding surface using Visual Inspection based on CSWIP requirement; and
3. Enable participants to acquire knowledge and skills in inspect welding surface using Dye Penetrant Inspection based on CSWIP requirement.

### Training Content:

- Welding terminologies and definitions;
- Weld joints, types and configurations;
- Welding processes and its characteristics;
- Welding consumables;
- Welding positions;
- Ferrous metals and non ferrous metals;
- Code and standards;
- Non destructive testing;
- Weld discontinuity and defects;
- solvent-removable, water-washable and post-emulsifiable method of Dye Penetrant Inspection methods;
- concise inspection instructions and test reports





3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## ALL WHEEL DRIVE PREVENTIVE MAINTENANCE AND SERVICE (INTERMEDIATE)



3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## NEW SYSTEM APPROACH IN VEHICLE MAINTENANCE AND SERVICES



### Course Objectives:

This course teaches participants the knowledge and skills needed to:

1. Understanding of the all-wheel drive vehicle system;
2. Enable to service all-wheel drive transaxle system;
3. Enable to service diesel common rail (CRDi); and
4. Operate all-wheel drive vehicle in offroad trail.

### Course Outline:

All-wheel drive intermediate maintenance and service is a technical course designed to :

1. Provide participants with an understanding of the concept of all-wheel drive vehicle system;
2. Enable participants to acquire knowledge and skills in all-wheel drive transaxle system;
3. Enable participants to acquire knowledge and skills in diesel common rail (CRDi); and

4. Enable participants to operate all-wheel drive vehicle in offroad trail.

### Training Content:

- *Introduction to tool, equipment, safety and workshop;*
- *The working principles of transaxles (AWD);*
- *Transaxle (AWD) system components and service;*
- *Service diesel common rail system (CRDi); and*
- *Operate all-wheel drive vehicle in offroad trail.*

### Course Objectives:

This course teaches participants the knowledge and skills needed to :

1. Understanding of the all-wheel drive vehicle system;
2. This course teaches participants the knowledge and skills needed to :
3. Understanding of the concept of basic Common-Rail Diesel System;
4. Acquire knowledge and skills in Common-Rail Diesel System;
5. Understanding of the concept of engine management system;
6. Acquire knowledge and skills in engine management system;
7. Understanding of the concept of hybrid electrical vehicle; and
8. Acquire knowledge and skills in hybrid electrical vehicle.

### Course Outline:

New System Approach In Vehicle Maintenance And Services is a technical course designed to :

1. Provide participants with an understanding of the concept of basic Common-Rail

Diesel System;

2. Enable participants to acquire knowledge and skills in Common-Rail Diesel System;
3. Provide participants with an understanding of the concept of engine management system;
4. Enable participants to acquire knowledge and skills in engine management system;
5. Provide participants with an understanding of the concept of hybrid electrical vehicle; and
6. Enable participants to acquire knowledge and skills in hybrid electrical vehicle.

### Training Content:

- Common-Rail Diesel System;
- CRDi system Inspection and diagnosis;
- Introduction Engine Management System (EMS);
- General Engine management system diagnostics & Service;
- High-Voltage Drives Safety rules, Responsibility, Safety Concepts;
- Hybrid Electric Vehicle operation and maintenance; and
- High-Voltage Battery Technology.





3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## INDUSTRIAL ELECTRICAL WIRING & SIEMENS LOGO



3 Weeks



15 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## APPLICATION AND DEVELOPMENT OF PLC SYSTEM (ELECTRICAL/ELECTRONIC)



### Course Objectives:

This course teaches participants the knowledge and skills needed to:

1. Prepare in a concise and compact manner to facilitate the three phase industrial electrical wiring of the premise buildings and application of Siemens LOGO! Logic Module;
2. Ensure its safety of use while meeting industrial electrical wiring and Siemens LOGO! Requirement;
3. Perform activities that involves design, application of Siemens LOGO! Logic Module programming , configuration , installation , inspection and troubleshooting the wiring circuit ;
4. Gain knowledge in Industrial electrical wiring & Siemens LOGO! Logic Module

### Course Outline:

Industrial electrical wiring & Siemens LOGO! Logic Module is a technical course designed to:

1. Provide participants with an understanding of the concept of three phase wiring and Siemens LOGO! logic module programming
2. Enable participants to acquire knowledge and skills in industrial wiring; and

3. Enable participants to acquire knowledge and skills in handling Siemens LOGO! Logic module.

### Training Content:

- Electrical Supply System;
- Three Phase Electrical Industrial Wiring System;
- Controller and Protection System for Electrical Wiring;
- Sequence of control and electrical drawing.
- Diversity Factor And Maximum Demand;
- Electrical Testing And Protection System;
- Electrical Accessories;
- Introduction to Siemens LOGO;
- Siemens Logo configuration;
- Siemens Logo Programming
- Siemens Logo Wiring system; and
- Siemens Logo Testing functionality.
- Siemens Logo Hardware and Software Troubleshooting
- Field visits are part of the programme whereby participants will visit couples of public / private institutions as well as industries in Malaysia the programme's objectives.

### Course Objectives:

This course is designed to meet the following objectives:

1. Provide participants with an understanding of the concept of Application, development and troubleshooting of PLC system;
2. Enable participants to acquire knowledge and skills in PLC programming and interfacing;
3. Enable participants to acquire knowledge and skills in HMI Programming and interfacing;
4. Enable participants to acquire knowledge and skills Manufacturing Automation System (MAS) module; and
5. Enable participants to acquire knowledge and skills in industrial automation troubleshooting.

### Course Outline:

Application, Development and troubleshooting of PLC System is a technical course designed to:

1. Provide participants with an understanding of the concept of Programmable Logic Controller combine with Human Machine Interface to get required control element to be done.
2. Enable participants to acquire knowledge and skills

in handling PLC control and it applications; and

3. Enable participants to acquire knowledge and skills in handling HMI (Human Machine Interface).

### Training Content:

1. Programmable Logic Control (PLC) Technology;
2. PLC hardware and software configuration;
3. PLC Input Output wiring and configuration;
4. PLC Step Sequence design, testing and debugging
5. PLC Control, Testing and Commissioning;
6. Human Machine Interface (HMI) hardware, software programming and interfacing
7. Manufacturing Automation System (MAS) setup and configuration;
8. Testing, Commissioning and Troubleshooting of PLC Control System.
9. Field visits are part of the program whereby participants will visit couples of public / private institutions as well





3 Weeks



10 persons



The program will be conducted through:

- Lectures
- Practical
- Discussions
- Evaluations
- Field Visits



## INDUSTRIAL ELECTRICAL WIRING & AC MOTOR CONTROL TECHNOLOGY



### Course Objectives:

This course teaches participants the knowledge and skills needed to :

1. Prepare a concise and compact manner to facilitate the three phase industrial electrical wiring and motor control;
2. Ensure safety in accordance with wiring requirement;
3. Perform inspect and test and troubleshooting of three phase electrical wiring installation;
4. Perform activities that involves design, application of motor control installation, inspection and troubleshooting motor control wiring circuit; and
5. Gain knowledge in Industrial electrical wiring & AC motor control technology.

### Course Outline:

Industrial Automation technology is a technical course designed to :

1. Provide participants with an understanding of the concept of Pneumatic System, Programmable Logic Controller, and Modular Production System in industries;
2. Enable participants to acquire knowledge

and skills in Pneumatic, PLC Programming; and

3. Enable participants to acquire knowledge and skills in Modular production system.

### Training Content:

- *Introduction to Electrical;*
- *Electrical Supply System;*
- *Three Phase Electrical Wiring System;*
- *Controller and Protection System for Electrical Wiring;*
- *Sequence of control and Electrical safety ;*
- *Diversity Factor And Maximum Demand;*
- *Electrical Testing And Protection System;*
- *Electrical Accessories;*
- *3 Phase Electrical Wiring & Motor Control System Inspection and Testing of Electrical Wiring;*
- *AC Motor Fundamental;*
- *Motor Starter controller Design Circuit;*
- *Motor starter wiring operation; and*
- *Motor starter Testing functionality.*



Further Inquiries

Please send you applications to the respective Malaysian Official Representatives by contacting or e-mail to the following address:

THE SECRETARIAT INTERNATIONAL TRAINING  
Centre for Instructor and Advanced Skill Training (CIAST)  
P.O Box 7012, Jalan Petani 19/1  
Section 19 Shah Alam  
40900 Selangor  
MALAYSIA.

Telephone: +603 – 5543 8200 / 8294 / 8311 / 8290 / 8321  
Fax: +603 – 5541 1508  
+603 – 5543 8274

Website : <http://www.ciastr.gov.my>  
FB Page : International Training Unit  
Email : [intl@ciastr.gov.my](mailto:intl@ciastr.gov.my)

## Thank You!

Kindly let us know if there are any details that require clarification.  
We would be glad to help.