
Organization of ITI's and scope of the Mechanic Motor Vehicle

Objective: At the end of this lesson you shall be able to

- **state brief introduction about Industrial Training Institutes (ITI).**
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Brief Introduction of Industrial Training Institute (ITIs)

Industrial Training Institute plays a vital role in economy of the country, especially in terms of providing skilled manpower.

The Directorate General of Training (DGT) comes under **Ministry of Skill Development and Entrepreneurship (MSDE)** offers a range of vocational training trades in different sectors based on economy /labour market. The vocational training programmes are delivered under the aegis of **National Council of Vocational Training (NCVT)**. Craftsmen Training scheme (CTS) and Apprenticeship Training Scheme (ATS) are two pioneer programmes of NCVT for Propagatory Vocational Training.

They are giving training about 132 trades including Engineering and Non-engineering trades with the duration of 1 or 2 years. The minimum eligibility for admission in ITIs 8th, 10th and 12th pass with respect to the trades and admission process will be held in every year in July.

From 2018 annual pattern was introduced with implemented revised syllabus.

At the end of each year, All India Trade Test (AITT) will be conducted in every July with OMR answer sheet pattern and multiple choice type questions. After passing, National trade certificates (NTC), will be issued by DGT which is authorized and recognized internationally.

After completion of instructional training with 'NTC' certificate, they have to undergo Apprenticeship training (ATS) for one or two year with respect to trades under the Apprentice ACT 1961, in various government and private establishments with stipend. At the end of the Apprenticeship training, All India Apprentice Test will be conducted and apprentice certificate will be issued. They can get job opportunities in private or government establishment in India/Abroad or they can start small scale industries in manufacturing or in service sector with subsidiary government loan.

Scope of the Mechanic Motor Vehicle

Objective: At the end of this lesson you shall be able to

- **importance and scope of the mechanic motor vehicle trade training.**
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Scope of the Mechanic Motor Vehicle training:

Mechanic Motor vehicle trade under craftsmen training scheme (CTS) is one of the most popular trade delivered nation wide through the network of ITI. This trade two year duration.

Carrier Progress Pathways: Can join the apprenticeship training in different types of industries and issue National Apprenticeship Certificate (NAC)

Can join Craftsman Instructor Training Scheme (CITS) to become an instructor in ITIs

Job Opportunities

- mechanic Motor vehicle can join in central and state government establishments, like railway, airport, marine, military and automobile industry.
- employment opportunities in overseas.

Self-employment opportunities

- Service centre in rural and urban areas.
- Maintenance contractor
- Manufacturer of sub-assembly

- Dealership/agency for automobile spare parts
- Own repair shop or garage.

General discipline in the institute: Always be polite, courteous while in institute

Do not arguments with others, on matters of related to your training or with the office while seeking clarifications

Do not bring bad name to your institute by your improper habitude.

Do not waste your precious time in gossips with your friends and on activities other than training.

Do not be late to the theory practical and other classes.

Do not interfere in other's activities.

Attentive and listen to the lecture carefully during the theory class and practical demonstration given by the instructor.

Give respect to your trainer and all other staffs and co-trainees in your institute.

Be interested in all the training activities.

Do not make noise and play while undergoing training.

Keep the institute premises neat and clean avoid polluting the environment.

Do not take away any material from the institute which does not belong to you.

Always attend the institute well dressed and good physical appearance.

Be regular to attend the training without fail and avoid absent from the theory or practical classes for simple reasons.

Prepare well before writing a test/examination.

Avoid any malpractice during the test/examination.

Write your theory and practical records regularly and submit them on time for correction

Take care of your safety as well as other's safety while doing the practicals.

Time-table

Practical and theory class hours are scheduled in advance and working hours as generally 8 hrs included lunch hours

Occupational health and safety

Objectives: At the end of this lesson you shall be able to

- **define safety**
 - **state the goal of occupational health and safety**
 - **explain need of occupational health and safety**
 - **state the occupational hygiene**
 - **list types of occupational hazards.**
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Safety

Safety means freedom or protection from harm, danger, hazard, risk, accident, injury or damage.

Occupational health and safety

- Occupational health and safety is concerned with protecting the safety, health and welfare of people engaged in work or employment.
- The goal is to provide a safe work environment and to prevent hazards.
- It may also protect co-workers, family members, employers, customers, suppliers, nearby communities, and other members of the public who are impacted by the workplace environment.
- It involves interactions among many related areas, including occupational medicine, occupational (or industrial) hygiene, public health, and safety engineering, chemistry, and health physics.

Need of occupational health and safety

- Health and safety of the employees is an important aspect of a company's smooth and successful functioning.
- It is a decisive factor in organizational effectiveness. It ensures an accident-free industrial environment.

Course Content in the syllabus

Engine, cooling, lubrication intake & exhaust, fuel emission, charging and starting systems.

- Identify the various types of tools equipment, raw materials, spares used in mechanic Motor vehicle trade,
- Practice to measuring, fitting, welding, sheet metal works, mechanical and electrical and hydraulic system fault diagnosis and rectification
- Practice to indent and repairing various type of diesel engines,

Facilities in I.T.I

Hostel facilities, first aid kit, visiting doctor's and also libraries are available in mandatory of the I.T.I'S

- Proper attention to the safety and welfare of the employees can yield valuable returns.
- Improving employees morale
- Reducing absenteeism
- Enhancing productivity
- Minimizing potential of work-related injuries and illnesses
- Increasing the quality of manufactured products and/or rendered services.

Occupational (Industrial) Hygiene

- Occupational hygiene is anticipation, recognition, evaluation and control of work place hazards (or) environmental factors (or) stresses
- This is arising in (or) from the workplace.
- Which may cause sickness, impaired health and well being (or) significant discomfort and inefficiency among workers.

Anticipation (Identification): Methods of identification of possible hazards and their effects on health

Recognition (Acceptance): Acceptance of ill-effects of the identified hazards

Evaluation (Measurement & Assessment): Measuring or calculating the hazard by Instruments, Air sampling and Analysis, comparison with standards and taking judgment whether measured or calculated hazard is more or less than the permissible standard

Control of Workplace Hazards: Measures like Engineering and Administrative controls, medical examination, use of Personal Protective Equipment (PPE), education, training and supervision

Occupational Hazards

"Source or situation with a potential for harm in terms of injury or ill health, damage to property, damage to the workplace environment, or a combination of these"

Types of occupational health hazards

- Physical Hazards
- Chemical Hazards
- Biological Hazards
- Physiological Hazards
- Psychological Hazards
- Mechanical Hazards
- Electrical Hazards
- Ergonomic Hazards.

1 Physical Hazards

- Noise
- Heat and cold stress
- Vibration
- Radiation (ionising & Nonionising)
- Illumination etc.,

2 Chemical Hazards

- Inflammable
- Explosive
- Toxic
- Corrosive
- Radioactive

3 Biological Hazards

- Bacteria
- Virus
- Fungi
- Plant pest
- Infection.

4 Physiological

- Old age
- Sex

- ill health
- Sickness
- Fatigue.

5 Psychological

- Wrong attitude
- Smoking
- Alcoholism
- Unskilled
- Poor discipline
 - absertecism
 - disobedience
 - aggressive behaviours
- Accident proneness etc,
- Emotional disturbances
 - violence
 - bullying
 - sexual harassment

6 Mechanical

- Unguarded machinery
- No fencing
- No safety device
- No control device etc.,

7 Electrical

- No earthing
- Short circuit
- Current leakage
- Open wire
- No fuse or cut off device etc,

8 Ergonomic

- Poor manual handling technique
- Wrong layout of machinery
- Wrong design
- Poor housekeeping
- Awkward position
- Wrong tools etc,

Safety Slogan

A Safety rule breaker, is an accident maker