



Model Curriculum

QP Name: Locksmith

QP Version: 1.0

NSQF Level: 2.5

Model Curriculum Version: 1.0

Capital Goods Skill Council || 1st Floor, L-29, Outer Circle, Connaught Place New Delhi – 110001 ||
[Email: coo@cgsc.in](mailto:coo@cgsc.in)

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Training Parameters

Sector	Capital Goods
Sub-Sector	Light Engineering Goods
Occupation	Locksmith
Country	India
NSQF Level	2.5
Aligned to NCO/ISCO/ISIC Code	NCO-2015/NIL
Minimum Educational Qualification and Experience	9th grade pass OR 8th grade pass with continuous schooling OR 5th grade pass with 4 years of relevant experience OR Ability to read and write with 4 years of relevant experience
Pre-Requisite License or Training	NA
Minimum Job Entry Age	18 years
Last Reviewed On	
Next Review Date	
NSQC Approval Date	
QP Version	1.0
Model Curriculum Creation Date	
Model Curriculum Valid Up to Date	
Model Curriculum Version	
Minimum Duration of the Course	30 Hours 00 Minutes
Maximum Duration of the Course	30 Hours 00 Minutes

Program Overview

This section summarizes the end objectives of the program along with its duration.

Training Outcomes

At the end of the program, the learner should have acquired the listed knowledge and skills.

- Interpret drawing/work instructions/SOPs for identification of raw material, tools and equipment required for various operations performed by locksmith.
- Carry out activities such as lifting of workpiece, inspection of tools and equipments etc.
- Carry out installation, adjustment and repairing of locks and lock systems.
- Carry out operations like duplication of keys, changing of lock combination and bypassing of locks.
- Work effectively and efficiently as per schedules and timelines.
- Implement safety practices.
- Optimize the use of resources to ensure less wastage and maximum conservation.

Compulsory Modules

The table lists the modules and their duration corresponding to the Compulsory NOS of the QP.

NOS and Module Details	Theory Duration	Practical Duration	On-the-Job Training Duration (Mandatory)	On-the-Job Training Duration (Recommended)	Total Duration
Bridge Module	02:00	00:00	0:00	0:00	02:00
Module 1: Introduction to the role of a Locksmith	02:00	0:00	0:00	00:00	02:00
Follow the health and safety practices at work NOS Version- 2.0 NSQF Level- 3	01:00	02:00	0:00	0:00	03:00
Module 2: Health and safety practices	01:00	02:00	0:00	00:00	03:00
Coordinate with co-workers to achieve work efficiency NOS Version-2.0 NSQF Level- 3	01:00	02:00	0:00	00:00	03:00
Module 3: Process of coordinating with co-workers to achieve work efficiency	01:00	02:00	0:00	00:00	03:00
Perform installation, adjustment and repairing operation of locks. NOS Version No. – 1.0 NSQF Level – 2.5	04:30	06:30	0:00	00:00	11:00
Module 4: Perform installation, adjustment and repairing operation of locks	04:30	06:30	0:00	00:00	11:00
Perform operations like duplication of keys, change combination and bypass of locks	04:30	06:30	0:00	00:00	11:00

NSQF Level – 2.5					
Module 5: Perform duplication of keys, change combination and bypass of locks	04:30	06:30	0:00	00:00	11:00
DGT/VSQ/N0101 - Employability Skills (3hours) NOS Version No. – 1.0 NSQF Level – 2	04:00	06:00	0:00	00:00	10:00
Module 6: Financial and Legal Literacy	02:00	03:00	0:00	00:00	05:00
Module 7: Essential Digital Skills	02:00	03:00	0:00	00:00	05:00
Total Duration	17:00	23:00	0:00	00:00	40:00

Module Details

Module 1: Introduction to the role of a Hammer and Tool Kit maker

Bridge module

Terminal Outcomes:

- Discuss the role and responsibilities of a Blacksmith.

Duration: 02:00	Duration: 00:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • List the role and responsibilities of a Hammer and Tool Kit maker. • Discuss the job opportunities of a Hammer and Tool Kit maker. • Describe the size and scope of the capital good industry and its sub-sectors. • Explain about Indian capital goods manufacturing market. • Discuss the standards and procedures involved in the different operations of forging. 	
Classroom Aids:	
Whiteboard, marker pen, projector, standard checklists and schedules	
Tools, Equipment and Other Requirements	

Module 2: Health and safety Practices

Mapped to CSC/N1335 v2.0

Terminal Outcomes:

- Demonstrate ways to maintain personal health and safety.
- Explain how to check the first aid box, firefighting and safety equipment.
- Explain the importance of following the fire safety guidelines.
- Explain the importance of following the emergency and first-aid procedures.

Duration: 01:00	Duration: 02:00
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Explain the recommended practices to be followed to ensure protection from infections and transmission to others, such as the use of hand sanitiser and face mask. • Explain the importance and process of selecting and using the appropriate PPE relevant to the task and work conditions. • Explain the importance of following the manufacturer’s instructions and workplace safety guidelines while working on heavy machinery, tools and equipment. • Explain how to handle and store hazardous materials safely. • Explain the importance of ensuring the first aid box is updated with the relevant first aid supplies. • Describe the process of checking and testing the firefighting and various safety equipment to ensure they are in a usable condition. 	<ul style="list-style-type: none"> • Demonstrate the use of appropriate Personal Protective Equipment (PPE) relevant to the task and work conditions. • Demonstrate the process of testing the firefighting and various safety equipment to ensure they are in usable condition. • Demonstrate how to use the appropriate type of fire extinguisher to extinguish different types of fires safely. • Demonstrate how to administer appropriate first aid to the injured personnel. • Demonstrate the process of performing Cardiopulmonary Resuscitation (CPR) on a potential victim of cardiac arrest.

- Describe the process of disposing of the non-recyclable waste safely and the applicable regulations.
- Explain the use of different types of fire extinguishers to extinguish different types of fires.
- State the recommended practices to be followed for a safe rescue during a fire emergency.
- Explain how to request assistance from the fire department to extinguish a serious fire.
- Explain the appropriate practices to be followed during workplace emergencies to ensure safety and minimise loss to organisational property.
- State the common health and safety hazards present in a work environment, associated risks, and how to mitigate them.
- Explain the importance of ensuring easy access to firefighting and safety equipment.
- Explain various causes of fire in different work environments and the recommended precautions to be taken to prevent fire accidents.
- Describe different methods of extinguishing fire.
- List different materials used for extinguishing fire.
- Explain the applicable rescue techniques to be followed during a fire emergency.
- Explain different types of first aid treatment to be provided for different types of injuries.
- State the potential injuries associated with incorrect manual handling.
- Explain how to move an injured person safely.
- Explain the importance of ensuring no obstruction and free access to fire exits.
- Explain how to free a person from electrocution safely.
- Explain how to administer appropriate first aid to an injured person.
- Explain how to perform Cardiopulmonary Resuscitation (CPR).
- Explain the importance of coordinating with the emergency services to request urgent medical assistance for persons requiring professional medical attention or hospitalisation.

- Explain the importance and process of reviewing the health and safety conditions at work regularly or following an incident.
- Explain the importance and process of implementing appropriate changes to improve the health and safety conditions at work.

Classroom Aids

Computer, Projection Equipment, PowerPoint Presentation and Software.

Tools, Equipment and Other Requirements

Personal Protective Equipment, Cleaning Equipment and Materials, Sanitizer, Soap, Mask

Module 3: Process of coordinating with co-workers to achieve work efficiency

Mapped to CSC/N1336 v2.0

Terminal Outcomes:

- Demonstrate ways to work and communicate effectively with co-workers.

Duration: 01:00	Duration: 02:00
Theory – Key Learning Outcomes <ul style="list-style-type: none"> • Explain the importance and process of effective communication in the workplace. • Explain the barriers to effective communication and how to overcome them. • Explain the importance of teamwork in an organisation's and individual's success. • Explain the importance of active listening in the work environment. • State the appropriate techniques to be followed for active listening. • Explain the importance of tone and pitch ineffective communication. • State the common reasons for interpersonal conflict and how to resolve them. • Describe the process of expressing and addressing grievances appropriately and effectively. • Explain the importance of adhering to the limits of authority at work. • Explain the importance of following the applicable quality standards and timescales at work. • Explain the importance of coordinating with co-workers to achieve the work objectives efficiently. • Explain the importance of providing appropriate information clearly and systematically in work documents. • Explain the importance and process of mentoring and assisting subordinates in the execution of their work responsibilities. • Explain the recommended practices to be followed at work to avoid and resolve conflicts at work. • Explain the importance and process of efficient and timely dissemination of information to the authorised personnel. • Explain the procedure to report inappropriate behaviour e.g., harassment. 	Practical – Key Learning Outcomes <ul style="list-style-type: none"> • Demonstrate the process of preparing the relevant documents and reports as per the supervisor's instructions, providing appropriate information clearly and systematically. • Demonstrate how to mentor and assist subordinates in the execution of their work responsibilities. • Demonstrate the process of using various resources efficiently to ensure maximum utilisation and minimum wastage.

Classroom Aids:
Training Kit (Trainer Guide, Presentations). Whiteboard, Marker, Projector, Laptop
Tools, Equipment and Other Requirements
NA

Module 4: Perform installation, adjustment and repairing operation of locks

Terminal Outcomes:

- Identify tools and equipment required for installation, adjustment and repairing operation of locks
- Perform installation, adjustment and repairing operations on various types of locks.

Duration: 04:30	Duration: 06:30
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe mechanical laws applicable on locks. • Discuss the information derived from the engineering drawings, work order, SOPs and instructions from supervisor. • List the tools, apparatus and input materials required during installation, adjustment and repairing operation of locks. • Describe the selection criteria of tools, apparatus and input materials required during work. • Describe metallurgical properties of the material used. • Discuss the organisational process of collecting and arranging the tools for installation, adjustment as well as repairing apparatus and input materials from the store for locks. • Summarise the steps to be performed for checking the tools, various apparatus and input materials before use. • Discuss various installation and repairing parameters and their impact on output. • Discuss the necessary precautions to avoid any hazard and accident during heat treatment activities. • Describe various types of locks and particular processes for each type of lock. • Explain methods of inspecting the quality, positioning, safety and other related things after completing the work. 	<ul style="list-style-type: none"> • Demonstrate the standard operating procedure to use tools for installation, adjustment and repairing of locks. • Show how to select and arrange the required tools, apparatus and input materials from the store. • Apply appropriate ways to check tools, heat treatment apparatus and input materials for proper functionality and calibration work before use. • Show how to prepare the work area and material for installation and repairing work as per SOP. • Show how to set the tools, equipment and apparatus and its parameters as per the work instructions. • Apply appropriate ways to monitor the process so that everything is followed according to SOP. • Demonstrate organisational procedure of performing various operations on different types of locks. • Apply appropriate ways to lubricate the locks as per SOP. • Employ appropriate ways of inspecting and measuring the worked output for required quality standards, dimensions, geometry and material and customer satisfaction. • Show how to shut down the various equipments to a safe condition after the job is completed. • Perform steps to report any emergencies/ deviations from the Work Instructions/ SOP to the supervisor.

Classroom Aids:

Whiteboard, marker pen, projector

Tools, Equipment and Other Requirements

- Basic tool box, Work bench with vice
- Screwdriver, hammer, plug follower, pinning tweezers, pinning kits, screws, rivets, riveting machine, shims, drilling machine etc.
- **Safety materials:** Fire extinguisher, leather safety gloves, leather aprons, safety glasses with side shields, ear plug, safety shoes and first-aid kit
- **Cleaning material:** Tip cleaner, wire brush (M.S.), cleaning agents, cleaning cloth, waste container, dust pan and brush set, liquid soap, hand towel

Module 5: Perform duplication of keys, changing of lock combination and bypassing of locks operation

Terminal Outcomes:

- Identify tools and equipment required for duplication of keys, changing of lock combination and bypass of locks.
- Perform key duplication, changing of combination and bypassing of different types of locks.

Duration: 04:30	Duration: 06:30
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Describe different types of keys and its duplication processes. • Describe different types of locks and its changing of lock combination processes. • Describe different types of locks and its bypassing processes. • Describe basic process followed for duplication of keys. • Describe basic process followed for changing of lock combination. • Describe basic process followed for bypassing of locks. • Discuss the information derived from the engineering drawings, work order, SOPs and instructions from supervisor. • List the tools, equipment, spares and various apparatus required during duplication of keys, changing of lock combination and bypassing of lock. • List the tools, equipment, dies and apparatus required during duplication of keys, changing lock combination and bypass of locks. • Describe the selection criteria of tools, equipment, dies and apparatus required for moulding, casting and finishing work. • Discuss the organisational process of collecting and arranging the tools, equipment, dies and various apparatus from the store. • Summarise the steps to be performed for checking the tools, equipment and apparatus before use. • Discuss the necessary precautions to avoid any hazard and accident during various activities. • Elaborate ways for duplication of the keys • Discuss the importance of monitoring process parameters during the various processes and correcting them as per the requirements. 	<ul style="list-style-type: none"> • Demonstrate the standard operating procedure to tools, equipment, apparatus required during duplication of keys, changing of lock combination and bypassing lock operations. • Show how to select and arrange the required tools, equipment, and apparatus from the store. • Apply appropriate ways to check tools, equipment, apparatus before use. • Apply appropriate ways to check that tools and locks are clean and free from dust and unwanted material. • Apply appropriate ways to check whether necessary oiling/ lubrication has been done on locks as well as tools. • Show how to set the key duplication machine and its parameters as per the work instructions. • Show how to setup for changing of combination of lock. • Show how to setup for bypassing the locks without key or code incase of emergency. • Apply appropriate ways to measure and mark the specified features for plate bending and forming operations on the workpieces as per job specification. • Perform the steps of lifting and placing the heat-treated pieces on the pressing machine manually or by using lifting tools. • Show how to select the program in the casting machine and modify it as per the production requirements and WI. • Read the measurement gauges to monitor the process parameters and maintain the quality standards. • Apply appropriate ways to monitor the forging operations and record the operational data as per the control plan. • Demonstrate organisational procedure of processes like key duplication and bypassing of locks casting for different types of locks.

Classroom Aids:

Whiteboard, marker pen, projector

Tools, Equipment and Other Requirements

- Basic tool box, Work bench with vice
- Lock picking, tweezers, lock bumping, torque wrench, rake, broken key extractor, key extractor, snap gun, key decoder.
- **Safety materials:** Fire extinguisher, leather safety gloves, leather aprons, safety glasses with side shields, ear plug, safety shoes and first-aid kit
- **Cleaning material:** Tip cleaner, wire brush (M.S.), cleaning agents, cleaning cloth, waste container, dust pan and brush set, liquid soap, hand towel

Module 6: Financial and Legal Literacy

Mapped to DGT/VSQ/N0101

Terminal Outcomes:

- Describe ways of managing expenses, income, and savings.

Duration: <02:00>	Duration: <03:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> Discuss the significance of using financial products and services safely and securely. Explain the importance of managing expenses, income, and savings. Explain the significance of approaching the concerned authorities in time for any exploitation as per legal rights and laws 	<ul style="list-style-type: none"> Demonstrate ways of managing expenses, income, and savings.
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	

Module 13: Essential Digital Skills

*Mapped to
DGT/VSQ/N0101*

Terminal Outcomes:

- Demonstrate procedure of operating digital devices and associated applications safely.

Duration: <02:00>	Duration: <03:00>
Theory – Key Learning Outcomes	Practical – Key Learning Outcomes
<ul style="list-style-type: none"> • Discuss the significance of using internet for browsing, accessing social media platforms, safely and securely 	<ul style="list-style-type: none"> • Show how to operate digital devices and use the associated applications and features, safely and securely
Classroom Aids:	
Whiteboard, marker pen, projector	
Tools, Equipment and Other Requirements	