

SILK SCREEN PRINTING [SSPR]

General Information:

1. Name of the Trade : Silk Screen Printing
2. Entry Qualification : Passed Class VIII
3. Duration of Training : 06 Months (Under Vocational Short Term Course]

Objective of the Course :

The objective of the course is to impart necessary competencies (with the focus on technical competencies like skill and knowledge) so that they become employable in the small scale printing industry and are able to set up an own business farm.

The main focus of the training is on lamination operations and basic silk screen printing.

Since the industrial production will be of increasing importance in the domestic market the printing shop will be in a more competitive situation. Therefore, it is very important that the training of silk screen printing focuses more on quality consciousness in order to improve the printing performance in the printing industry.

At the end of the trainings the trainees will be able to

- Convert given pattern designs into a pattern for individual choice and to print a matter accordingly to an agreed quality standard.
- Organize, Plan and evaluate their work independently (methodical competency) and to estimate the materials required.
- Apply basic techniques for pattern manipulation, lamination etc.

The course content is to be covered in less than 26 weeks since some weeks will be used for enrolment procedures, leave of the instructor, holidays, examination and tests, industrial visits etc.

Course Break-up :

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| a) Practical instruction | : | 288 hours |
| b) Theoretical instruction | : | 67 hours |
| c) Entrepreneurship instruction | : | 05 hours |

Industrial Visit:

Industrial cum study tour to at least two different types of printing machineries.

Basic Training :

1. Introduction of the trade. Instruction on Safety precautions as applicable to the trade, correct techniques to avoid accidents. Handling, care and maintenance of tools, equipment and materials used in Retouching Section, dress, correct working posture.

THEORY**(67 hrs.)**

1. Brief history of printing, comparative analysis of different printing processes.
2. Equipment & materials used in Retouching work, Retouching desk, illuminating lighting and viewing, factors affecting colour judgment.
3. Printing surfaces- outline screen printing processes and preparation. What is printing? Composing (DTP), stencils and design.
4. Process camera - parts, mechanical and operational features.
5. Process lens, prism and properties; use focus theory of light.
6. Photographic materials - plates and films, emulsions, preparation, handling and care.
7. Use of screen glass, screen angle, screen distance and squeegee and their maintenance.
8. Equipment and materials used in preparation of jig & frames, bolting cloth, printing table, different adhesives used, handling and care.
9. Screen printing process- storing of film, required size, using positive, how to expose, develop and edit etc.
10. Effect of humid weather on the film coating, hardening of the film, developing the exposed film, transferring the stencil, selection of mesh for bolting cloth, to be printed on different materials.
11. Revision and Test.

Practical**(288 hrs.)**

1. Safety hazards, preventive measures and safety precautions for chemical use.
2. Prepare Raw Materials. Various printing Inks, screen and other miscellaneous raw materials, preparation of various printing surfaces.
3. Direct process - using direct coating material & indirect process (Transfer process) - pigment paper, screen cloth. Use process cameras, light source, arc lamp, exposing photographic plates and films for screen-printing.
4. Proper storage of screen - glass cross line screen, screen angles, screen distance, dot formation, contact screens.
5. Arrange colour separation using camera and scanner.
6. Prepare different types of Jig & Frame for bolting cloths.
7. Storing of film, sizes of film, using of positive. Humidity control of process room, Washing the exposed film, adhering the stencil to the mesh and drying. Stripping off the backing film, cleaning off used stencils and using different methods.
8. Prepare different screen materials.
9. Substrate related use, finishing and its type.
10. Introduction of machines and mechanical screen printing
11. Revision and Test.

ENTREPRENEURIAL INSTRUCTION

Sl. No.	Course Curriculum	Hours.
1.	Brief idea on nature of small business management and Industrial Technical Skill.	
2.	Preparation of schemes and vetting by Financial Institution / Lead Bank for obtaining loans.	
3.	Rules for setting up of business / production unit.	
4.	Maintenance of Accounts, labour, capital etc.	
5.	Man management, Communication, Motivation	
6.	Operational management	
7.	Market survey	
8.	Quality control	
9.	Visit to Industrial units for gathering idea to start the unit	
10.	Choice of technology as per demand of local people of the area/district / state.	
11.	Knowledge of Sales tax etc.	
12.	Brief idea for registration of SSI, Trade License, Project Report, Proposal for loans, etc.	
		Total 05