**Certificate Course in Footwear Design and Production**

Course Id : (MSME / CCFDP/001)

* Candidate Eligibility: **10th** Pass
* No. Of NOS (If QP) : **n/a**
* NSQF Level : **Level 4**
* Cost Category : 1
* Course Duration: 780 HOURS
	+ Theory duration : 80/Hrs
	+ Practical duration : 700/Hrs
	+ OJT duration : **0**

**Trainer Qualification Work Experience**

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| --- | --- |
| **Trainer Qualification** |  **Work Experience** |
| * Minimum – Complete Trained in **Footwear Technology and** Passed From any affiliated institution.
* Certified for Job Role: “Trained In **Footwear Technology** with minimum accepted 50%
* Recommended that the Trainer is certified for the Job Role: “Trained In **Footwear Technology** with minimum accepted 50%
* Alternatively, must have successfully undergone organized TOT workshop
 | * Minimum 3 years in Footwear manufacturing **and** experience in relevant job role and a Minimum of 1 to 2 years Training experience in relevant job role.
 |

**CONTACT DETAILS OF THE BODY SUBMITTING THE QUALIFICATION FILE**

**Name and address of submitting body:**

**O/o DC (MSME),**

**Ministry of Micro, Small and Medium Enterprises
Nirman Bhawan,**

**Maulana Azad Road,**

**New Delhi - 110108**

**Name and contact details of individual dealing with the submission**

**Name : Shri. Sanatan Sahoo**

**Position in the organisation : Director**

**Address if different from above : C-41 & 42, Site- “C” Industrial area, Sikandra, Agra**

**Tel number(s) : 0562-2642005 Mobile: 08958996611**

**E-mail address :** **info@cftiagra.org.in**

**List of documents submitted in support of the Qualifications File**

1. Curriculum Document
2. Evaluation (Marking) Scheme
3. Industrial Validations
4. **SUMMARY**

|  |  |
| --- | --- |
| **Qualification Title**  | **Certificate in “Footwear Design & Production”** |
| **Qualification Code**  | MSME / CCFDP /**001** |
| **Nature and purpose of the qualification**  | **Nature:**  **Certificate in “Footwear Design & Production”****Purpose:** To create Multi Skilled Workers /Operator for patterns cutting and various shoe manufacturing operations and to develop supervisory capacity for quality and timely production of different types of footwear.Qualifying learners to work in various departments in footwear manufacturing unit to carry out task like Line Supervisor in production, Line Quality Inspector etc.  |
| **Body/bodies which will award the qualification** | **MSME- Technology Centre** **Ministry of Micro, Small and Medium Enterprises**, **New Delhi**  |
| **Body which will accredit providers to offer courses leading to the qualification** | **MSME- Technology Centre** **Ministry of Micro, Small and Medium Enterprises**, **New Delhi** |
| **Body/bodies which will carry out assessment of learners** | **MSME- Technology Centre** **Ministry of Micro, Small and Medium Enterprises**, **New Delhi** |
| **Occupation(s) to which the qualification gives access** | **Skilled worker / Supervisor (Production)/ Quality Inspector in footwear manufacturing units.** |
| **Licensing requirements** | **Not Applicable** |
| **Level of the qualification in the NSQF** | **Level 4** |
| **Anticipated volume of training/learning required to complete the qualification** | **780 hrs.** |
| **Entry requirements and / or recommendations** | **10th pass**  |
| **Progression from the qualification** | **Job Progression:**AFTER THE COMPLETION OF COURSE AND WITH 5 YEARS OF SECTOR RELATED EXPERIENCE, THE TRAINEE CAN REACH UP TO LINE SUPERVISIOR / LINE QUALITY INSPECTOR IN FOOTWEAR MANUFACTURING UNITS  |
| **Planned arrangements for the Recognition of Prior learning (RPL)** | **NA** |
| **International comparability where known** | **Not Known** |
| **Date of planned review of the qualification.** | **January 2019** |

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| **Formal structure of the qualification** |
| **Certificate in Footwear Design and Production**  |
|  |
| **Sr.No.** | **Subject Code** | **Subject Title** | **Mandatory / Optional** | **Estimated size (learning hours)** | **Marks** | **Level** |
| **Theory** | **Practical** | **Total** |
| 1 | CCFDP -101 | Designing and Pattern Cutting | Mandatory | 10 | 120 | 130 | 100 | 4 |
| 2 | CCFDP -102 | Clicking Technology | Mandatory | 10 | 120 | 130 | 100 | 4 |
| 3 | CCFDP -103 | Closing Technology | Mandatory | 10 | 180 | 190 | 100 | 4 |
| 4 | CCFDP -104 | Lasting & Making Technology | Mandatory | 10 | 180 | 190 | 100 | 4 |
| 5 | CCFDP -105 | Industrial Management & Safety | Mandatory | 20 | 60 | 80 | 50 | 4 |
| 6 | CCFDP -106 | Quality Control and Standardization | Mandatory | 20 | 40 | 60 | 50 | 4 |
| **Total Hours & marks** | **80** | **700** | **780** | **500** |  |

**Qualification Pack is attached as Annexure - 1**

 Please attach any document giving further detail about the structure of the qualification – e.g. a

Curriculum Document or a Qualification Pack.

Give the titles and other relevant details of the document(s) here. Include page references showing where to find the relevant information.

**SECTION 1**

**ASSESSMENT**

**Body/Bodies which will carry out assessment:**

MSME- Technology Centre (Ministry of Micro, Small and Medium Enterprises), New Delhi

**How will RPL assessment be managed and who will carry it out?**

*NA*

**Describe the overall assessment strategy and specific arrangements which have been put in place to ensure that assessment is always valid, reliable and fair and show that these are in line with the requirements of the NSQF.**

Arrangements are made by the institute to ensure that the evidence on which assessment judgments made are comparable for all students and that the judgments made will not vary from assessor to assessor.

1. **ASSESSMENT GUIDELINE:**

* - Criteria for assessment based on each learning outcome, will be assigned marks proportional to its importance.
* The Assessment for the theory and practical part is based on knowledge bank of questions created by concern trainers and Examination cell (CFTI, Agra)
* For each individual batch, Examination cell will create unique questions papers for theory part as well as practical for each candidate at each examination.
* To pass the qualification, every trainee should score a minimum of 40% in Theory and 60% for practical subject.
* Assessment comprises the following components:
* Job carried out in labs/ workshop.
* Record book/ daily diary.
* Progress chart
* Module test
* Attendance and punctuality.

2. **ASSESSORS:**

CFTI, Agra’s concerned faculty deal the different subjects for the students of **Certificate in “Footwear Design & Production,** also assess the students as per guidelines set by examination cell of CFTI, Agra. Faculties are been trained from time to time upgrade their skills on various aspects such as conduction of assessment, teaching methodology etc.

3. ELIGIBILITY TO APPEAR IN THE EXAM:

Minimum 80% attendance is compulsory for the students to appear for the assessments.

4. MARKING SCHEME:

Please refer Annexure - I for marking / evaluation scheme.

**5. PASSING MARKS:**

Passing criteria is based on marks obtained in attendance record, , term works, Job carried out in labs/ workshop, Record book/ daily diary, Assessment of the Answer sheet, Progress, Module test Attendance and punctuality.

Minimum Marks to pass practical exam – 60%

Minimum Marks to pass final exam – 40%

Minimum Marks to class test – 40%

**6. RESULTS AND CERTIFICATION:**

The assessment results are backed by evidences collected by assessors. Successful trainees are awarded the certificates by MSME- Technology Centre (Ministry of Micro, Small and Medium Enterprises), New Delhi

**ASSESSMENT EVIDENCE**

ASSESSMENT EVIDENCE

Assessment evidence comprises the following components document in the form of records:

* Job carried out in labs/ workshop.
* Record book/ daily diary.
* Assessment of the Answer sheet.
* Module test
* Attendance and punctuality.

|  |  |
| --- | --- |
| **Title of Component** | **CERTIFICATE IN FOOTWEAR DESIGN & PRODUCTION**  |
| **Unit No.** | **Outcomes to be assessed** | **Assessment criteria for the outcome** |
| **1** | Identify customer’s requirement and create Conceptual footwear Design and cut the patterns accordingly. | * **Discuss Fashion Considerations like**
* **Line:** its effect on footwear design, upper and bottom proportion and balance
* **Shape:** The creation of difference last unit silhouettes to emphasis or understate design modes.
* **Colour:** The psychological effect of colour and the importance of the creation of seasonal colour ranges.
* **Pattern:** The effect of surface pattern detailing and modeling on man - made or leather upper materials, and on unit design.
* **Texture:** The effect that surface texture can have on the appearance and wear ability of footwear products.
* **Concepts of Foot and Last :**
* Discuss Styles and designs covering men's, women, and children work, including shoes, sandals and boots.
* Different lasts for men's, women's and children’s footwear.
* Define Selection of sole units, both rigid and flexible of man-made/natural com position.
* To understand selection of footwear components.

.**Discuss pattern cutting Techniques:*** List Variety of last covering and forme taking methods. Paper, tapes, vacuum forme, slotted/ crumpled paper.
* Discuss Designing on the 3 dimensional shape of the last or vacuum forme, geometrically designing on the flat 2 dimensional, mean forme shapes.
* Understand the Production of a working standard (compatible to construction allowances) and sectional patterns for outside and linings
* **Production of Pattern Standards:**
* Apply knowledge and techniques to produce working standards for the main styles and constructions of men, women, and children.
* To practice Work in Court, Oxford, Gibson, Monk, One, two and three bar straps, trainer, gusset, casual and slip-on taking into account modern production methods, techniques and processes.
* **Trims, Accessories & Furniture Design:**
* Develop footwear’s by using buckles, bows, straps, elastics, Velcro, saddles, collars, eyelets, laces, padding, ski- hooks, sliders and fittings for functional and decorative purposes. Relationship to each other.
* **Production of Bottom Stock Patterns:**
* Develop bottom plate pattern and its use in the production of the insole, sock and sole pattern for various construction, cemented veldschoen, welted California, slip lasted, sandal skeletons for strap designs, Louis flat, knock – on and wedge heel sole pattern heel cover pattern for wedge Louis knock-on.
* **Specialized Pattern Cutting Techniques :**
* Illustrate Springing/Grading techniques for economy look and fit over and under - recorded pattern shapes.
* Appreciation of pattern interlock without effecting style or line.
* **Pull - Over/Prototype Production:**
* Apply knowledge, techniques and practical shoemaking skills acquired in other areas of the programme to produce design prototypes, ready for appraisal and assessment, to commercial qualities of suitability and excellence.
* **Design/Style Specification:**
* Illustrate Specification procedures for use in production, detailing of style, edge treatments, materials and components used, colors, last and constructions, information and sequence for uppers and bottom stock processes, finishing and shoe room treatments.
 |
| **2** | To possess knowledge about different materials used in clicking section and concepts of clicking with the use of latest technology. | * Discuss upper components (upper, lining, reinforcement).
* Different Materials used in footwear upper making man-made materials, leather (basic characteristics),
* Identify Hand cutting and related tools and equipment.
* Discuss Machine cutting and related equipment and dies.
* Illustrate various material waste and causes.
* Define Pattern layout on plain materials, Pattern layout on patterned materials and Pattern layout on fabric materials.
* Discuss Characteristics of leather from the view point of the upper cutting.
* Brief leather material quality variations in relation to different parts of the skin/ hide (stretch - resistance - color - grain - texture).
* List upper components specific quality requirement {vamp - quarters – inside- outside etc.)
* To understand defects marking up.
* Identify leather grading, Leather sorting, Leather store and storage.
* Discuss Hand cutting pattern storage, Size making (figure and codes).
* Importance of rational and economic cutting as required to product cost.
* Describe economic aspect of hand clicking as compared with press clicking.
* List advantage of press clicking for intricate patterns.
* Importance of light in the clicking room.
* Apply Quality control applied for upper clicking.
* Discuss Safety precautions applied to upper clicking
* **Department Procedure :**
* Discuss Hand cutting equipment - maintenance - the clicking room managers Responsibility for the maintenance of equipment’s
* Need for economy and accuracy in clicking.
* Need for Accuracy, brevity and clarity.
* Produce basic graphic information.
* Different elements of occupational health and safety.
* Discuss personal protective equipment in the work place. Practice: The use of hand clicking knife in cutting exercises.
* **Discuss general qualities of leather:**
* Identify Lines of tightness and stretch
* Understand Quality variance in skin, Defects in upper leather.
* Identify different Materials for shoe uppers.
* Types of leather in common use.
* Understand examinations of leather.
* Discuss Skins, hides and sides.
* Understand Examination of effects of tanning on :

 (i) Quality (ii) Purpose of different leathers.* Identify correct storage of leather.
* List of fabrics in general use for linings and the cutting system need.a. Press cutting equipment b. Compare swing beam and traveling head presses c. Other cutting method, Laser, water jet, reciprocating knife. d. Types of knife comparisons
* **Basic Clicking Costing**
* Discuss Cutting allowance and clicking cost sheet.
 |
| **3** | To supervise the production process in closing department and knowledge about different constructions and latest machines. | * Discuss basic types and specialist stitching machines.
* Elaborate operational sequence for Skiving, backing, stitch marking, perforation, folding and ancillary machinery like for basic styles.
* Different methods of upper reinforcements, edge and decorative treatments.
* Various types of seams. Welding treatment for upper assembly, decoration and ornaments.
* Classification of Needles and threads: Types, sizes, selection, classification, relationship, application to Work.
* Discuss Jig assembly of upper components.
* Identify Automatic and semi-automatic equipment for upper processing.
* Discuss Upper shaping by forming equipment/blocking machine
* Plan departmental management of work loading like types and advantages of transporter systems, Random and final inspection.
* **Closing Practical:**
* Discuss different types of stitching and Non-stitching machine available.
* Various techniques of handcrafts and the use of Machines for similar operations, use and in the use of adjustments necessary to functional efficiency.
* Practice making of basic styles of men's and women's footwear"
 |
| **4** | To supervise the production process of different construction in lasting/bottom department using latest technology. | * Types and uses of toe-puffs and stiffeners.
* Identification of methods of attachments.
* Methods of conditioning uppers and components.
* Apply Lasting principles and methods of application.
* Plan Lasting and bottoming systems for different types of construction in general use.
* Perform Heeling processes, including heel building and heel finishing, covering Systems and methods of heel attachment.
* Various Systems of transportation and track management.
* Discuss combined lasting system.
* Discuss theory and practice of head setting - moist and dry head effects on. Materials and adhesive
* Use of hot-melt adhesive in lasting and bottoming.
* Discuss Lasting faults and effects upon subsequent operations.
* **Bottoming:**
* List correct techniques for sole attachment.
* Elaborate Composition, characteristics and uses of insole and soling materials for different constructions.
* Discuss Machine cutting direct/caster and planet, rounding operations.
* Plan preparation of cut stock and bottom components including pre finishing and assembly of pre-fabricated and Louis heel bottom units
* Assembly and storage of lasts and components.
* Discuss Standardization of components.
* Practice Multiple thicknesses cutting of components
* Identify Pre-moulded shank, insole assemblies
* Use confirming equipment's.
* Practice Departmental management.
* Plan Control of components and raw materials, Fitting up to ticket requirements"
* **Finishing :**
* Procedure and processes for various soling and heating materials and units.
* Practice methods of attaching Top- piecing and types and characteristics of material available.
* Discuss objective and methods of finishing - types and functions of machines and equipment used. Finishing processes for both leather and non-leather soles and heels. Effects of faults in preceding operations on the finishing processes. Selection of appropriate processes.
* Comparisons between various finishing systems - pre - finishing vs finishing on the shoe. Cutters, irons, adhesives, inks, stains, waxes and finishes used. Decorative treatments and rending.

 Discuss Statutory requirements concerning general, fire, mechanical and electrical safe working conditions will be emphasized.* **Shoe Rooming :**
* Analyze functions and processes of the shoe room, their importance to sales appeal. Shoe room operations and techniques - socking, cleaning, repairing, dressing, top spraying, trim attaching, quarter reforming, irons, inspection procedures, boxing etc., for leather and non - leather materials. Machine adjustments.
* Discuss Fault identification, diagnoses of cause and defects in work. Applications of, decorative treatments, e.g. antique, shadow spray etc. final examination and inspection procedures - quality control packing and presentation techniques" storage of boxed footwear to prevent ageing.
* Recognize statutory requirements: general, fire, mechanical and electrical safe working conditions in relation to the above.
 |
| **5** | Industrial Management & safety | * Managerial Concepts and principles, functions of management, purchase and store s control, materials requirement planning, inviting tenders and quotations, comparison statement, identifying the sources, purchase order, receiving of materials, verification, store keeping, inventory control
* Fundamentals of finance Management: financial statement and budgetary control provision and management or working capital.
* Fundamentals of production Management : pre – production, planning, production planning and control, method study, work measurement etc.
* Fundamentals of human resource management: manpower requirement planning recruitment of employees, job analysis, job description, specialization, payment method, job evaluation, career planning, legal requirements.
* Functions of Management
1. Planning
2. Organizing
3. Staffing
4. Directing
5. Administering
6. C0 – ordination
7. Communication
8. Controlling

Management Principals.Purchase & store controlProblem planning & control * Discuss Occupational (Industrial) Hygiene- Anticipation, Identification, Assessment and Control of all Health Hazards at Workplace, Evaluation of Health Hazards at Workplaces. Occupation Hazards with respect to Physical Hazards, Chemical Hazards, Biological hazards. List of Industries involving Hazardous process Occupational Hazards under the First Schedule of the Factories Act,1948; Permissible Limits of certain Chemical substances in work environment under the Second Schedule of the Factories Act,1948. Hazards Control : Elimination, Control , Substitution, Isolation, Personal Protective Equipment(PPE). First-aid practice in industry: ABC of First-aid for injured and sick in Industry-Managing First-aid centers- Equipping First-aid center- Training of First-aiders-Training of employees in First-aid.
* Understand Industrial Safety- Causes of Accident, Accident statistics, Accident Reporting system, Safety Audit, Accident prevention, Disaster Planning, Safety Committee, MAHC, Case studies, Chernobyl and similar disasters.
 |
| 6 | To understand the concept of Quality control and ensure quality assurance by reducing the non conformance as per quality manual. | * Meaning of Quality "Assurance", "guarantees" and company commitment to being the "best". Critical dimensions of quality. Vision and Mission of organization-concept & purpose. Benefits of a quality assurance system, i.e., eliminate customer complaints and increased efficiency. Absolutes of quality - i.e., a system of Prevention. Preparation of a quality policy document.
* Discuss the benefits of a Quality Assurance system ie eliminate customer complaints and increased efficiency .
* Define the absolute of Quality – ie a system of prevention
* Discuss the preparation of a Quality policy documents.
* Discuss the impact of operator motivation in having quality standards of operation .
* Discuss the cost to a company of n on conformance (rejects)especially those returned from the customer.
* Discuss the value of Audits and audit trails to identify and eliminate non conformance .
* Explain how a system of prevention is far better than one of compensation.
* Discuss the cost of not meeting the customer requirements.
* Discuss the need of commitment to change ,to adapt to succeed in production technologies .
* Explain the need to reduce lead time on delivery ,capability ,speed technology and flexibility.
* Explain the supplier customer requirements ,the need to keep each other information.
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| **Means of assessment 1 and 2**Skill performance is assessed by conducting* Job carried out in labs/ workshop for each module.
* Record book/ daily diary for each module.
* Assessment of the Answer sheet for each module.
* Final exam after completion of all modules.
* Attendance and punctuality for each module.
 |
| **Pass/Fail**Passing criteria is based on marks obtain in attendance record, , term works Job carried out in labs/ workshop, Record book/ daily diary, Assessment of the Answer sheet, Module test Attendance and punctuality.Minimum Marks to pass practical exam – 60%Minimum Marks to pass final exam – 40%Minimum Marks to class test – 40% |

**SECTION 2**

**EVIDENCE OF LEVEL**

**Awarding bodies will enter a proposed NSQF level for the qualification in the Qualification File Summary. This section asks for the evidence on which that proposal is based. The evidence must refer to the level descriptors of the NSQF.**

NSDA recommends an approach to working out the level of qualifications which starts with the level descriptor domains (Process, Professional knowledge, Professional skill, Core skill and Responsibility: see annex A). Two variants for providing the evidence of level are offered here: Option A and Option B in the following pages. Awarding bodies should choose the option which best suits the qualification.

**OPTION A**

|  |
| --- |
| **Title/Name of qualification/component: certificate in Footwear Design & Production Level:4** |
| **NSQF Domain** | **Outcomes of the Qualification/Component** | **How the job role relates to the NSQF level descriptors** | **NSQF Level** |
| Process | * To assist in Design and Develop the footwear as per customer specifications using well developed skills.
* To assist develop Design and Technology support system based on the product requirements.
* To assist in preparation and follow the quality assurance manual to meet the customer specifications.
* To analyze the raw materials using latest testing procedures to ensure the international standards and compliance.
* To ensure the production process is as per production manual and approved samples.
* To possess process knowledge in various footwear construction and SOPs.
* Describe Manufacturing Processes and process plan.
 |  In the occupation of footwear skilled worker , each work is considered as new challenge , as the production sequence in each and construction is different .The new product design and development and trail production is always a challenge as product which shall come for design and production are always unpredictable and new from the previous one. Even though the skilled worker has experience in different construction, but he/she has to face challenges of type of construction due to change in material specifications and customer survey. Production requirements shall change from customer to customer and job holder has to provide tangible solution with required quality and at optimum cost. Many time the Designer are not clear in the procedures in familiar context. In this qualification Job Holder he has to carry out Quality Assurance of the production and material as per the quality compliance manual which includes receiving inquiry from customer, material testing reports internally and through outside agencies.  Job holder shall understand the design from inter departmental team and from customer. Job holder shall release bill of material (BOM). Job holder shall assist in preparing mold base / die set /other jigs and fixtures and tools etc. Job holder will assist the verification process and release of SOP made by the team members. Job holder shall follow the trial production and rectification and validation of the final product as per requirements. | Level 4 |

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| --- | --- | --- | --- |
| **NSQF Domain** | **Outcomes of the Qualification/Component** | **How the job role relates to the NSQF level descriptors** | **NSQF Level** |
| Professional knowledge | * Knowledge in facts, principles, processes and general concepts in footwear Designing and Development.
* Describe different Construction used in footwear production
* Describe different material used in footwear production and its applications.
* Define preparation of SOP for production .
* List different International quality standards in practice.
 |  As job holder is dealing with design and development ,quality assurance ,material testing in the footwear product manufacturing units, it is required that job holder should possess overall (factual ) practical knowledge in the field of footwear production and development like designing ,production, quality assurance ,material testing ,Industrial Management etc. Job Holder shall apply his/her Knowledge in facts ,principles ,processes and general concepts in footwear Designing and Development in general construction methodology like, types of design and various development techniques types of footwear construction, different size systems, different types of raw materials, etc. Job Holder shall have detail knowledge of elements of tool, material and sequence also shall list elements used in press tool, Mould, Jigs and fixture and Die, application of each part and importance, manufacturing operations of each element, accuracy criteria for production elements.Job holder should possess knowledge in pattern development using computer aided design software to meet utmost perfection. And he/she should know how to do the production costing of the particular product using scientific methodologies. Through general concepts and knowledge job holder shall judge the best production process with appropriate reasoning like best economy, quality requirement etc. | Level 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **NSQF Domain** | **Outcomes of the Qualification/Component** | **How the job role relates to the NSQF level descriptors** | **NSQF Level** |
| Professional skill | * Identify basic tools and materials
* To assist team members to Design and Development of Jigs and Fixtures
* To assist team members to Design and Development of SOP
* To assist team members to Design and Development of Mould/Die
* To assist team members to Develop creative solution to the predictable and unpredictable problems in production process .
* To assist team members to Prepare costing of product
* To assist team members to Troubleshoot the problems in SOP and validation
 |  Job holder shall assist the sectional heads in the design and development of footwear’s through following practical skill: gather accurate information on the requirements of the customer, create conceptual design, confirm the customer's objectives for the products or processes, Using standard unit system as customer’s requirement, plan for production process and Develop a schedule for the production process e.g. works order date, plan date, actual completion date, Obtain and review existing information with reference to the specified design requirement light weight ,packing and shipping instruction , etc.   Job Holder shall play a significant role in preparing concept and classify the appropriate procedure and shall also explain various theoretical and practical aspect footwear manufacturing.  In the qualification job holder shall provide practical solutions the abstract problems which arises during the design and development and production of footwear such as: clicking error, size marking errors, color mismatch, defects in the components, stitching error, attaching errors, skiving errors and sole attaching and bonding issues . Job holder shall solve above problems by undertaking self-study and providing creative solution by using Engineering research methodology where job holder shall undertake experimentation on the problem and can generate feasible solution wherever applicable. Job holder may use Engineering and Rapid Prototyping technology to address the issue as per the demand. | Level 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **NSQF Domain** | **Outcomes of the Qualification/Component** | **How the job role relates to the NSQF level descriptors** | **NSQF Level** |
| Core skill | * Use basic health and safety practices at the workplace
* Apply basis arithmetic skills in Design & production
* Work in projects
* Should posses knowledge in language to communicate in written and oral and technically.
* Basic understanding the environment
 |  Job holder shall work in team under close coordination of the section heads . He should be capable to understand the project objectives, and to assist sectional heads in preparation of conceptual plan, selection of SOP based on capabilities , use Presentation skills,. And he should be capable to communicate clearly about the project requirement to the group members through written /verbal/e mail etc. as per organizational standard, identify different design options which will meet requirements and specification, Identify sources of information and support for problem solving, seek assistance and support from other sources to solve problems, Identify effective resolution techniques e.g. advance machineries and production technologies ,research methodology etc., Assist in Preparing cost estimate of the project, Prepare design & development , production plan with timeline and responsibilities of self . Carry out basic arithmetic calculation required material testing e.g tensile test ,tear strength , sole adhesion etc .  Job holder shall use protective equipment while working in shop floor, wear helmet, state the name and location of people responsible for health and safety in the workplace, state the names and location of documents that refer to health and safety in the workplace .To posses knowledge about job-site hazardous work and state possible causes of risk or accident in the workplace like slippery floor, carry out safe working practices while dealing with hazards to ensure the safety of self and others like disposal of oil, waste etc. .The job holder should use the various appropriate fire extinguishers on different types of fires correctly, participate in emergency procedures | Level 4 |

|  |  |  |  |
| --- | --- | --- | --- |
| **NSQF Domain** | **Outcomes of the Qualification/Component** | **How the job role relates to the NSQF level descriptors** | **NSQF Level** |
| Responsibility | The job holder is Responsible for his Own Work and also the process of leaning new concept in continuous basis |  Job holder shall learn and work independently and should take the responsibility to learn new. After receiving instruction and specifications from the customer job holder shall prepare the proto type with time line under the close supervision of respective heads and he should learn new job responsibilities as team members like preparation of bill of material, preparation of mould base/ die set, technical charts, specifications sheets, quality manuals, verification and release of article for trail production and rectification along with validation and will have some responsibility of output of group. Job holder should be in continues learning and development by time to time discussing with them various issues of project suitability to specified machine, new development in machines, selection of material, new development in the materials and manufacturing processes.Job holder shall follow work standard, specific norms and procedures laid down by the organization by understanding the concepts. | Level 4 |

**SECTION 3**

**EVIDENCE OF NEED**

**Qualification File**

**What evidence is there that the qualification is needed?**

* The Footwear industry is a both a demand and resource based industry and sees a great potential for development in both domestic and global context.
* The quality and productivity are important factors and the supervisors having the competencies in both technical and Quality field are required as mentioned by the footwear industry in different forums.
* The Central Leather Research Institute had made a survey and had brought out a report highlighting that the need of multi skilled workers with relevant managerial knowledge are very much required for the footwear industry.

**Trainees trained during last 5 years:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Sr.No** | **Total Trainees trained** | **Total Opted for Placement** | **Total Placed** |
| 1 | 478 | 360 | 360 |

**What is the estimated uptake of this qualification and what is the basis of this estimate?**

* Indian Footwear Industry plays a vital role in socio- economic development of the country. It is a labor intensive industry and has created an employment opportunity for 1.1 million people directly.
* India is the second largest producer of footwear with the capacity of 2 billion pairs per annum that includes 95 % for domestic market and 5 % for exports.
* Indian industry earns nearly 2.7 billion US $ through exports. Although the country is enriched with abundant raw material resources with highest cattle population (21%)of world, the exports is still below 3%. Thus it sees a great potential ahead and the well qualified matured techno- managers shall be highly instrumental to take the footwear industry ahead.
* The Council for Leather Exports (CLE) has fixed a target to double the figure of exports from leather sector from 6 to 14 billion US $ in the year 2022 and there will be a need of qualified technocrats with management knowledge.
* The link to NSDC Human Resource & Skills Requirement in Leather and Leather goods Sector is <http://www.nsdcindia.org/sites/default/files/files/Leather-and-Leather-Goods.pdf>

**What steps were taken to ensure that the qualification(s) does (do) not duplicate already existing or planned qualifications in the NSQF?**

* The curriculum has been developed by CFTI, Agra in the year 2008-09 keeping in view the emerging need of the footwear and allied industry at Agra and across the country.
* The students already passed out in last Twenty Batches are well accepted in the industry and there is a good demand of the students pursuing this course.
* As such, no equivalent course is available in existence with NSQF. It is quite optimistic to see the requirement of this qualification as a whole in the industry

.

**What arrangements are in place to monitor and review the qualification(s)? What data will be used and at what point will the qualification(s) be revised or updated?**

* The curriculum is being reviewed periodically and validated with a group of intellectuals, industrialists and experts in the field.
* Now an Industry Advisory committee has been constituted at the instance of Ministry of MSME, Govt. of India to understand the needs of the industry and to line up the services and activities of the institute. It will work as guiding force to review and revise different curriculums of the institute including the said qualification from time to time.

**NSQF QUALIFICATION FILE**

Version 6: Draft of 08 March 2016

**SECTION 4**

**EVIDENCE OF PROGRESSION**

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| **What steps have been taken in the design of this or other qualifications to ensure that there is a clear path to other qualifications in this sector?*** At the time of designing and introduction of this course at CFTI, Agra, a thorough brain storming session and discussion was held along with the industry people, Industry Association and Ex- students of the institute and found that there is a need of Supervisors in Indian Footwear and allied industry**.**
* After intensive consultation with the experts and senior faculties, the curriculum was designed and validated at different forums and then started in 2005-06 .
* The students of previous batches are well placed in the industry and some of them have reached to higher positions whereas some of them have started their own business ventures.
* Keeping above in view, it is anticipated that this qualification shall have a bright prospect.
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**Career progression of CFDP students:**