

### **Glass and Ceramics Decorative Master Craftsman**

<b>Formal structure of the qualification Mandatory components</b>				
	<b>Title of component and identification code/NOSs/Learning outcomes</b>	<b>Mandatory/ Optional</b>	<b>Estimated size (learning hours)</b>	<b>Level</b>
1	Examine the type of material and material productivity standards	Mandatory	30 (T-10,P-20)	3
2	Collect tools and equipment as per the SOPs	Mandatory	30 (T-10,P-20)	3
3	Prepare the colour samples and oxides while mixing them in a prescribed quantities	Mandatory	60 (T-10,P-50)	3
4	Demonstrate the sketching and painting process on decorative artefacts	Mandatory	60 (T-10,P-50)	3
5	Check colour quality and colour productivity standards	Mandatory	60 (T-10,P-50)	3
6	Maintain product packaging SOPs	Mandatory	30 (T-10,P-20)	3
7	Practice of E-commerce activities	Mandatory	60 (T-10,P-50)	3
8	Ensure workplace safety, Security & practices for Personal Hygiene at workplace	Mandatory	30 (T-10,P-20)	3
9	Carry adequate waste management	Mandatory	30 (T-10,P-20)	3
10	OJT / Field work		150 Hrs	03
11	Employability Skill (60 Hrs) as per NCVET		60	03
<b>Total Learning (Theory +Practical +ES+OJT) Hours:</b>		600(90T+300P+60 ES+150 OJT/Field work)) Hours		

Title of component and identification code.	Mandatory/ Optional	Estimated size (learning hours)	Level
<b><u>I. Theory</u></b> Theory component of the course is to develop relevant basic technical information & knowledge about	<b>Mandatory</b>	<b>90</b>	<b>3</b>
<b><u>II. Practical</u></b> Institutional component of Practical training of the course is to impart relevant basic technical skills to	<b>Mandatory</b>	<b>300</b>	<b>3</b>
<b><u>III. OJT / FIELD WORK</u></b> OJT component of the course is to develop competency in the real work situation in an agriculture farm or any other place having facilities relevant to the trade with special emphasis on basic safety and hazards	<b>Mandatory</b>	<b>150</b>	<b>3</b>
<b><u>IV. EMPLOYABILITY SKILLS</u></b> Employability Skills component of the course is to impart Soft skills which include Communication Skills, Digital skill, Financial Entrepreneurship etc.	<b>Mandatory</b>	<b>60</b>	<b>3</b>
<b>Total (I+II+III)</b>		<b>600</b>	

## **OUTCOMES**

Outcomes to be assessed	Assessment criteria for the outcome
1. Examine the type of material and material productivity standards	1.1. Receive the job order and instructions from supervisor as per the SOP
	1.2. Explain the different types of materials and their properties used for decorative artefacts
	1.3. Identify the type of canvas for glass painting based on structure, pattern and technique
	1.4. Prepare the job sheet based on the weight, size and design pattern of the prescribed material
	1.5. List the parameters required for analyzing appropriate mixing proportion based on color viscosity, oxides granules, nature of hue, and color saturation range
	1.6. select the SOPs for manual or mechanical method based on prescribed job sheet
2. Collect tools and equipment as per the SOPs	2.1. Collect the artefact as per the prescribed design pattern and specifications based on the type of material
	2.2. Differentiate between various types of oxides that are required to generate requisite color as per end product
	2.3. Arrange raw materials in appropriate quantities as per the standard procedures based on color mixing formulation sheet
	2.4. Place the raw materials prior to the mixing stage by utilizing appropriate tools

	2.5. deliver the remaining raw material and ingredients at designated location as per the SOP with proper labelling that ensures traceability and identification
3. Prepare the colour samples and oxides while mixing them in a prescribed quantity	3.1. Select the appropriate PPE for performing the operations
	3.2. Use approved procedures to inspect articles visually for any possible defects as per required standard parameters prior to work
	3.3. Prepare the base colour to design on the surface of the article
	3.4. Collect glass colour and glass liners with water and oxides in an appropriate quantity for glass articles
	3.5. Prepare the colour formulation for ceramic artefacts while mixing acrylic paints, araldite and chalk powder
	3.6. Mix the raw materials and ingredients in the container of prescribed volume and size for manual mixing technique
	3.7. Use appropriate amount of varnish for clay art for a magnifying look
	3.8. Examine the prepared colour composition based on color viscosity, oxides granules, nature of hue, and color saturation range
	3.9. Clean tools and equipment after their use to prevent colour spots, stains and rust
4. Demonstrate the sketching and painting process on decorative artefacts	4.1. Ensure perform painting in a ventilated and lit place
	4.2. Examine the surface defects based on Unevenness, chipped glass, holes on surface, rough texture, etc.
	4.3. Prepare the design on the surface of the article with base colour
	4.4. List the step by step colouring process on the article as per design requirement
	4.5. Calculate the number coats required on the surface based on primer coats, intermediate coats and final coats
	4.6. Use OHP sheet to achieve complete traceability of the design on the surface by glass liner
	4.7. Perform the sample testing of colours on the raw piece to check the colour formulation and its properties
	4.8. Collect the clay solution of Ceramic powder and Araldite
	4.9. Prepare the sculpture on the surface of the artefact
	4.10. Use appropriate hand tools and equipment for tracing the final structure on the surface
	4.11. Apply the SOPs required to make the artefact dry in room temperature for at least 2 to 3 hours
	4.12. Place the varnish on the surface of the artefacts for smooth finishing and shininess
5. Check colour quality and colour productivity standards	5.1. Compare the colour as per the colour quality standards as per design pattern and specifications
	5.2. Maintain records of inspection results and tests as per prescribed job sheet
	5.3. Review the periodical targets set by the supervisor

6. Maintain product packaging SOPs	6.1.Carefully wrap and label the packages
	6.2.Ensure mentioning of proper dimensions and type of materials as per export SOPs
	6.3.Discuss the importance of marking/coding/ labelling/ numbering while maintaining reports and records
	6.4. Match the packaging material with the invoice to avoid duplicacy
	6.5. Interpret about HSN and other export related codes
7. Practice of E-commerce activities	7.1.Maintain the documents for placing product Online
	7.2 Follow the practices related to DIY activities
	7.3. Explain the importance of placing and labelling the IEC and HSN codes on the products
	7.4. List down the activities related to advertising and marketing for product promotion
8. Ensure workplace safety, Security & practices for Personal Hygiene at workplace	8.1 Outline the health, safety and security policies at workplace to avoid workplace for potential risks and threats
	8.2 Follow adequate safety standards while handling materials, chemicals, tools, and electrical equipment
	8.3 Sanitize hands at regular intervals using hand wash & alcohol-based sanitizers
	8.4 Clean the workplace using sanitizers and keep it free from dust, waste and spillage
	8.5 Ensure that personal protective equipment is available at the workplace at all time
	8.6 Follow first procedures during emergencies situations at the workplace
	8.7 Practice the appropriate measures to make yourself in a calm way while dealing with accidents, emergencies and in illness, fires or any other natural calamity
	8.8 Participate in the evacuation and mock drills procedures based on organizational standards and procedures in case of an emergency
	8.9 interpret the SOPs related to workplace security and emergencies protocols
	8.10 Take appropriate health and hygiene procedures at the workplace to avoid injuries and health issues
	8.11 Maintain social distancing in social gatherings at the workplace
	8.12 Use mask at the workplace to prevent mouth and nose from dust particles and dangerous bacteria
	8.13 Identify health concerns like fever, cold & cough, etc. for self, colleague and other family members
	8.14 Report any flu-like symptoms, fever, diarrhoea, sore throat, constant sneezing, coughing, runny nose and vomiting to the supervisor

	8.15 Undergo preventive health check-ups at regular intervals as per the SOP
9. Carry adequate waste management	10.1. Employ standard procedures of waste disposal and waste storage in the proper containers as per SOP
	10.2. Place the used PPEs in a designated bag, sealed and labelled as contagious waste
	10.3. Segregate the recycled and non-recycled wastes as per SOP
10. OJT / Field Work	(8.1) Assessor will check report prepared for this component of training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain. (The trainee is expected to undertake work in actual workplace under any supervisor for 300 Hours.)
11. Employability Skill (60 Hrs)	As per NCVET guided course module for 60 Hrs

### **Syllabus**

Sl. No	CONTENT	DETAILS	HOURS
<b>1</b>	<b>Examine the type of material and material productivity standards</b>		
	<b>Theory</b>	<ol style="list-style-type: none"> <li>1. Explain the importance of discussing the Job order with supervisor</li> <li>2. Discuss the various properties of the materials used in making the decorative artefacts</li> <li>3. Describe the various types of pattern, bases structure and techniques required to make the decorative artefacts</li> </ol>	<b>10</b>
	<b>Practical</b>	<ol style="list-style-type: none"> <li>1. Apply the standard operating procedures in order to analyze the job specifications based on the parameters based on size, shape, pattern and art work design</li> <li>2. Select the design pattern, structure and SOPs required to make the design and sketch on the glass and ceramic objects</li> <li>3. Collect the tools and equipment and raw materials from the designated location in prescribed quantities as per the Job Sheet</li> <li>4. Perform the process of examine the physical and chemical properties of the colour and oxides formations</li> </ol>	<b>20</b>
<b>2</b>	<b>Collect tools and equipment as per the SOPs</b>		
	<b>Theory</b>	<ol style="list-style-type: none"> <li>1. Ensure appropriate handling and utilizing of materials, tools, and equipment along with preventive and precautionary measures</li> <li>2. Identify the standard organizational procedures required for storing the tools and equipment safely after their use</li> <li>3. Discuss the importance of marking/coding/ labelling/ numbering while maintaining reports and records</li> </ol>	<b>10</b>
	<b>Practical</b>	<ol style="list-style-type: none"> <li>1. List the functions of different hand tools like hammer, spanner, files, chisels, needle, etc.</li> </ol>	<b>20</b>

		<ol style="list-style-type: none"> <li>2. Check if the equipment/machine is functioning normally before commencing work and rectify wherever required</li> <li>3. Demonstrate usage of tools and equipment for further processing</li> <li>4. Perform standard operating procedures to be followed while collecting raw materials and ingredients in prescribed quantities from the designated storage location</li> <li>5. Demonstrate the organizational SOPs required to place the raw materials and ingredients at workplace for further processing</li> <li>6. Apply the standard procedures to be followed while delivering the remaining and unused material at the designated storage location</li> </ol>	
<b>3</b>	<b>Prepare the colour samples and oxides while mixing them in a prescribed quantities</b>		
	<b><u>Theory</u></b>	<ol style="list-style-type: none"> <li>1. Select the suitable PPE based on the prescribed Job Sheet at the workplace</li> <li>2. List the common defects and faults that can be rectified during the creation of artefacts</li> <li>3. Describe the importance of using PPE at the time of handling tools and equipment at workplace</li> <li>4. Discuss the importance of visual inspection on the prepared solution</li> </ol> <p>based on the physical and chemical properties</p>	<b>10</b>
	<b><u>Practical</u></b>	<ol style="list-style-type: none"> <li>1. Apply the SOPs required to make base colour to design as per the design specifications and nature of the surface</li> <li>2. Place the raw materials and ingredients in an appropriate quantities required to make glass articles</li> <li>3. Demonstrate the process of preparing the colour formulation required for ceramic artefacts</li> <li>4. Follow the SOPs required to mix the raw materials and ingredients in a container as per the prescribed quantities for manual mixing techniques</li> <li>5. Place the appropriate amount of varnish on the ceramic clay art as per the SOPs</li> <li>6. Demonstrate the standard operating procedures to be followed while removing or unloading the colour formulation from the container</li> <li>7. Perform visual inspection required to examine the prepared solution and surface finishing as per SOPs</li> <li>8. Prepare a sample format /template to collect information during inspection based on colour viscosity, oxide granules, nature of hue and colour saturation range</li> <li>9. Ensure that work area and tools are cleaned and inspected according to workplace procedures</li> </ol>	<b>20</b>
<b>4</b>	<b>Demonstrate the sketching and painting process on decorative artefacts</b>		
	<b><u>Theory</u></b>	<ol style="list-style-type: none"> <li>1. Explain the importance of working in a ventilated and lit place to avoid potential risks and threats</li> <li>2. explain the standard organizational parameters that are followed to examine the productivity standards</li> <li>3. Prepare the list of processes as per the SOP required</li> </ol>	<b>10</b>

		<p>for colouring on the article as per design requirement and nature of material</p> <ol style="list-style-type: none"> <li>Determine the surface and design defects based on unevenness, chipped glass, holes on surface, rough texture, etc. that need to be examine while making the artefacts</li> </ol>	
	<b>Practical</b>	<ol style="list-style-type: none"> <li>Demonstrate the process of preparing the design on the surface of the article based on the selection of the material</li> <li>List the procedural parameters as per the SOPs required for colouring the article as per the design specifications</li> <li>Determine the number coats required on the surface of the object based on primer coats, intermediate coats and final coats</li> <li>Apply SOPs to be followed while using OHP sheets in order to achieve complete traceability of the design on the surface</li> <li>Demonstrate the sample testing on the raw pieces to examine the colour formulation and its properties</li> <li>Prepare the clay solution while mixing the Ceramic powder and araldite required for further processing</li> <li>Perform SOPs required to prepare the sculpture on the surface of the artefact as per the approved job sheet</li> <li>Demonstrate the process of tracing the final structure on the surface while using the prescribed tools and equipment</li> <li>Allow the final artefact to dry in a room temperature for at least 2 to 3 hours for ensuring the durability and sustainability of the object</li> <li>Apply the final coat of varnish on the surface of the object to</li> </ol> <p>achieve smoothness and shininess</p>	<b>20</b>
<b>5</b>	<b>Check colour quality and colour productivity standards</b>		
	<b>Theory</b>	<ol style="list-style-type: none"> <li>Discuss the parameters that indicate deviation in the prepared colour solution based on their physical and chemical properties</li> <li>Explain the standard organizational parameters that are followed to examine the colour productivity standards</li> </ol>	<b>10</b>
	<b>Practical</b>	<ol style="list-style-type: none"> <li>Demonstrate the SOPs that are required to check the prepared solution during the process based on its colour saturation properties</li> <li>Perfrom the visual inspection on the colour formation and sketch outline as per the design specifications</li> <li>Determine the pastel colours formation while applying on the ceramic artefacts</li> <li>Examine the viscosity and adhesiveness properties of the decorative article on the surface of the object such as glass and ceramic</li> <li>Prepare the sample template that indicate all the standard results achieved during this operation</li> <li>Review the periodic schedules based on that productions rate can be evaluated after the regular interval of time as per SOP.</li> </ol>	<b>20</b>

<b><u>6</u></b>	<b>Maintain product packaging SOPs</b>		
	<b><u>Theory</u></b>	<ol style="list-style-type: none"> <li>1. Identify the parameters of wrapping and labelling the packages as per SOPs</li> <li>2. discuss the importance of marking/coding/ labelling/ numbering while maintaining reports and records of packaging</li> </ol>	<b>10</b>
	<b><u>Practical</u></b>	<ol style="list-style-type: none"> <li>1. Demonstrate the process of mentioning the proper dimensions and type of materials as per export SOPs</li> <li>2. Apply the SOPs required to match the packaging material with the invoice to avoid duplicacy</li> <li>3. Perform the packaging SOPs while packing the delegate items such as glass and other sensitive artefacts</li> <li>4. Demonstrate the process of placing the prescribed bar codes on the items as per the periodic schedule of packaging</li> </ol>	<b>20</b>
<b><u>7</u></b>	<b>Practice of E-commerce activities</b>		
	<b><u>Theory</u></b>	<ol style="list-style-type: none"> <li>1. Explain the importance of analyzing the different cues from the market</li> <li>2. Explain the importance of following standard operating procedures to make the product more productive, reliable and cost effective</li> <li>3. List down the activities related to advertising and marketing for product promotion</li> </ol>	<b>10</b>
	<b><u>Practical</u></b>	<ol style="list-style-type: none"> <li>1. Apply the standard organizational procedures to ensure the products are made based on the existing market demand and trends</li> <li>2. Ensure proper placing and labeling required for the IEC and HSN codes on the products</li> <li>3. Carry out the practices related to DIY activities</li> </ol>	<b>20</b>
<b><u>8</u></b>	<b>Ensure workplace safety</b>		
	<b><u>Theory</u></b>	<ol style="list-style-type: none"> <li>4. Describe the health and safety related instructions applicable to the workplace</li> <li>5. Explain how to monitor the workplace and work processes for potential risks and threats</li> <li>6. Discuss workplace hygiene, sanitation and job specific safety procedures</li> </ol>	<b>10</b>
	<b><u>Practical</u></b>	<ol style="list-style-type: none"> <li>1. Demonstrate how to clean and maintain the cleanliness of the work area using approved sanitizers to keep it free from dust, waste, and spillage</li> <li>2. Carry adequate safety measures while handling materials, chemicals, and tools</li> <li>3. Apply standard operating procedures to clean the tools and equipment used with recommended sanitizers following specifications and organizational standards</li> <li>4. Report any accidents, incidents or problems without delay to the supervisor and take necessary immediate</li> <li>5. Participate actively in employee work groups on 5s and encourage team members for active participation</li> </ol>	<b>20</b>
<b><u>9</u></b>	<b>Carry adequate waste management</b>		
	<b><u>Theory</u></b>	<ol style="list-style-type: none"> <li>1. Describe the importance of disposing waste in the designated area at workplace</li> </ol>	<b>10</b>



		2. List the important preventive measures in order to preserve the resources at workplace 3. Discuss the safety measures to be followed while handling and moving waste and debris	
	<b>Practical</b>	1. Demonstrate the SOPs while disposing the used PPEs and other aids at designated locations 2. Perform the SOPs to segregate the waste and debris in selected colour bins 3. Apply the SOPs while segregating the recycled and non-recycled waste and debris 4. Demonstrate the standard sanitization protocols with alcohol based disinfectants at the designated location where waste are disposed at regular interval of time	<b>20</b>

### **OJT/ Field Work: 150 Hrs.**

OJT component of the course is to develop competency in the real work situation in an agriculture farm or any other place having facilities relevant to the trade with special emphasis on basic safety and hazards

### **Detail of Employability Skills Syllabus: 60 hours**

### **Employability Skills (60 hours)**

#### **Model Curriculum**

#### **Module Summary:**

S. No	Module Name	Duration (hours)	Assessment Marks
1.	Introduction to Employability Skills	1.5	2
2.	Constitutional values - Citizenship	1.5	2
3.	Becoming a Professional in the 21st Century	2.5	6
4.	Basic English Skills	10	6
5.	Career Development & Goal Setting	2	3
6.	Communication Skills	5	4
7.	Diversity & Inclusion	2.5	2
8.	Financial and Legal Literacy	5	5
9.	Essential Digital Skills	10	8
10.	Entrepreneurship	7	4
11.	Customer Service	5	3
12.	Getting Ready for Apprenticeship & Jobs	8	5
	<b>Total</b>	<b>60</b>	<b>50</b>

#### **Key Learning Outcomes**

##### **Introduction to Employability Skills      Duration: 1.5 Hours**

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

##### **Constitutional values - Citizenship      Duration: 1.5 Hours**

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

##### **Becoming a Professional in the 21st Century      Duration: 2.5 Hours**

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking,

problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.

7. Describe the benefits of continuous learning.

#### **Basic English Skills      Duration: 10 Hours**

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

#### **Career Development & Goal Setting      Duration: 2 Hours**

11. Create a career development plan with well-defined short- and long-term goals

#### **Communication Skills      Duration: 5 Hours**

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

#### **Diversity & Inclusion      Duration: 2.5 Hours**

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

#### **Financial and Legal Literacy      Duration: 5 Hours**

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids

#### **Essential Digital Skills      Duration: 10 Hours**

21. Describe the role of digital technology in today's life
22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
24. Create sample word documents, excel sheets and presentations using basic features
25. utilize virtual collaboration tools to work effectively

#### **Entrepreneurship      Duration: 7 Hours**

26. Explain the types of entrepreneurship and enterprises
27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
29. Create a sample business plan, for the selected business opportunity

#### **Customer Service      Duration: 5 Hours**

30. Describe the significance of analyzing different types and needs of customers
31. Explain the significance of identifying customer needs and responding to them in a professional manner.
32. Discuss the significance of maintaining hygiene and dressing appropriately

#### **Getting ready for apprenticeship & Jobs      Duration: 8 Hours**

33. Create a professional Curriculum Vitae (CV)
34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
35. Discuss the significance of maintaining hygiene and confidence during an interview
36. Perform a mock interview
37. List the steps for searching and registering for apprenticeship opportunities

### **Assessment Strategy**

The trainee will be tested for the acquired skill, knowledge and attitude through formative/summative assessment at the end of the course and as this NOS and MC is adopted across sectors and qualifications, the respective AB can conduct the assessments as per their requirements.

<b>LIST OF TOOLS &amp; EQUIPMENT FOR EMPLOYABILITY SKILLS</b>		
<b>S No.</b>	<b>Name of the Equipment</b>	<b>Quantity</b>
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below)	As required
2.	UPS	As required

3.	Scanner cum Printer	As required
4.	Computer Tables	As required
5.	Computer Chairs	As required
6.	LCD Projector	As required
7.	White Board 1200mm x 900mm	As required
<i>Note: Above Tools &amp; Equipment not required, if Computer LAB is available in the institute.</i>		

#### Marks Distribution

Outcome	Outcome code	Total Th marks	Total Pr marks	Total OJT marks
Examine the type of material and material productivity standards	HAC/1504/OC1	20	50	0
Collect tools and equipment as per the SOPs	HAC/1504/OC2	10	50	0
Prepare the colour samples and oxides while mixing them in a prescribed quantities	HAC/1504/OC3	20	70	0
Demonstrate the sketching and painting process on decorative artefacts	HAC/1504/OC4	20	70	0
Check colour quality and colour productivity standards	HAC/1504/OC5	20	40	0
Maintain product packaging SOPs	HAC/1504/OC6	20	50	0
Practice of E-commerce activities	HAC/1504/OC7	20	70	0
Ensure workplace safety, Security & practices for Personal Hygiene at workplace	HAC/1504/OC8	10	50	0
Carry adequate waste management	HAC/1504/OC9	10	50	0
Able to work in real job situation with special emphasis on basic safety and hazards in this domain.	HAC/1504/OC10	0	0	300
Employability Skill-60 Hrs	DGT/VSQ/N0102	50	0	0