

LEARNING OUTCOME BASED VOCATIONAL CURRICULUM

CLASS 11 & 12

**SECTOR:
MEDIA AND
ENTERTAINMENT**

JOB ROLE

GRAPHIC DESIGNER

(QUALIFICATION PACK: REF. ID. MES/Q0601)



State Council of Educational Research & Training (SCERT) Kerala

(Department of General Education, Government of Kerala)

Vidhya Bhavan, Poojappura, Thiruvananthapuram



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www.scert.kerala.gov.in

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FOREWORD

A collaborative initiative for developing learning outcome based vocational curriculum and courseware aimed at integrating both vocational and general qualifications has been implemented by the State Council of Educational Research and Training (SCERT) Kerala and the PSSCIVE Bhopal. This is intended to open up pathways of career progression for students and the SCERT Kerala is developing curricula under the project as an integral part of Vocationalisation of Education under Samagra Shiksha, approved by the Government of Kerala. Decisive improvement in the teaching-learning process and working competencies through learning outcomes that have been judiciously embedded in the vocational subject is expected to be the major impact that will be brought about by the learning outcome based vocational curriculum.

It is a matter of great pleasure to introduce this learning outcome based vocational curriculum as part of the vocational training package for the job role of Graphic Designer (MES/Q0601). The curriculum has been developed for the higher secondary students of vocational education and is aligned to the National Occupation Standards (NOSs) of a job role identified and approved under the National Skill Qualification Framework (NSQF).

The key aim of the curriculum will be to provide children with employability and vocational skills that would in turn aid occupational mobility and lifelong learning. A major transformation in the teaching process is also aimed at, which will be brought about through interactive sessions in classrooms, practical activities in laboratories and workshops, projects, field visits, and professional experiences.

The curriculum has been meticulously developed and judiciously reviewed by a group of experts and their much-valued contributions are immensely acknowledged. The imminent utility of the curriculum will without doubt, be adjudged by the qualitative improvement that it brings about in teaching-learning. The feedback and suggestions on the content by the teachers and other stakeholders will be of immense value to us in bringing about further enhancement and augmentation to this document.

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We are extremely thankful to Dr. RVG Menon, Chairperson, High Power Committee for the implementation of NSQF in Kerala, Dr. Sukesh Kumar, Former Principal, Government Engineering College Palakkad and Sri. G S Unnikrishnan Nair, Former Director State Agricultural Management and Extension Training Institute (SAMETI), Thiruvananthapuram for their mentorship in the process of developing this document. The contributions made by Dr. Vinay Swarup Mehrotra, Professor and Head, Curriculum Development and Evaluation Centre (CDEC), PSSCIVE Bhopal in development of the curriculum are duly acknowledged.

We are grateful to the experts for their earnest efforts and contributions in the development of this learning outcome based vocational curriculum. Their names are acknowledged in the list of contributors.

We are grateful to the Vocational Higher Secondary wing of the Directorate of General Education (DGE) Kerala for extending the support to develop this curriculum document on time by providing the service of its teaching staff.

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1. COURSE OVERVIEW

COURSE TITLE: GRAPHIC DESIGNER

GENERAL OBJECTIVES

Graphic designer is a flexible job and many companies search for new and talented graphic designer these days. A talented graphic designer can easily find jobs in Printing presses, Publishing companies, various design consultancies, advertising agencies, design studio, educational institutions, marketing firms, computer games, product packaging companies, and many other places.

On successful completion of this course, the learners are expected to;

- conceptualize creative idea for production.
- design layouts and select colours, images to use in the design.
- create graphics and layouts for product illustrations, company logos, and websites.
- develop graphic designs that meets client's objectives.
- evaluate time and cost to complete graphic design.
- create/edit raster and vector graphics.
- manage equipment & materials used for design purpose.

COURSE OUTCOMES

On completion of the course, students should be able to;

- apply effective oral and written communication skills to interact with people and customers
- identify the principal components of a computer system
- demonstrate the basic skills of using computer
- demonstrate self-management skills
- demonstrate the ability to provide a self-analysis in context of entrepreneurial skills and abilities.
- demonstrate the knowledge of the importance of green skills in meeting the challenges of sustainable development and environment protection.
- communicate effectively with the client.
- develop skill in identifying hardware and software for graphic design purpose.
- apply the idea, theme and concept of a design.
- develop typing skill in English and regional language.
- develop skill to handle Digital Camera, Scanner and Printer.
- develop skill in editing/drawing software required for a particular job like colour level adjustments, retouching, gray scaling, etc.

- acquire skill in creating a design for Newspaper advertisement, Book cover, Flyer, Photo Album etc. using image editing software.
- develop skill in creating a Company Logo for print and visual media using Vector software application.
- develop skill to identify different file formats and various file conversion methods.
- able to list out different types of colours used in designing and develop skill in colour separation techniques.
- designing various products like visiting card, notice, poster, book cover, brochure, Calendars, Invitations, menu card, magazines etc.
- develop skill in handling design software packages for illustration and Page Layout.
- develop skill in imposition.
- corporate identity design- Students work on developing a visual identity for a company or product.
- develop design skill in print and visual media.

COURSE REQUIREMENTS

The learner should have the basic knowledge of science.

COURSE DURATION: 600 hrs

Class 11	300hrs
Class 12	300hrs
Total	600 hrs

2. SCHEME OF UNITS

The unit-wise distribution of hours and scores for Class 11 is as follows:

CLASS 11			
	Units	No. of Hours for Theory and Practical = 300	Max. scores for Theory and Practical =100
Part A	Employability Skills		
1.	Communication Skills – III	25	10
2.	Self-management Skills – III	25	
3.	Information and Communication Technology Skills – III	20	
4.	Entrepreneurial Skills – III	25	
5.	Green Skills – III	15	
	Total	110	10
Part B	Vocational Skills		
6.	Introduction to Graphic Designing	35	
7.	Graphic Visualization	40	
8.	Graphic Design Tools	40	
9.	Design Techniques	40	
10.	Maintain workplace health & safety	10	
	Total	165	40

Part C	Practical Work		
	Practical Examination	06	15
	Written Test	01	10
	Viva Voce	03	10
	Total	10	35
Part D	Project Work/Field Visit/ OJT		
	Practical File/Student Portfolio	10	10
	Viva Voce	05	05
	Total	15	15
	Grand Total	300	100

The unit-wise distribution of hours and scores for Class 12 is as follows:

CLASS 12			
	Units	No. of Hours for Theory and Practical =300	Max. scores for Theory and Practical = 100
Part A	Employability Skills		
1.	Communication Skills – IV	25	10
2.	Self-management Skills – IV	25	
3.	Information and Communication Technology Skills – IV	20	
4.	Entrepreneurial Skills – IV	25	
5.	Green Skills – IV	15	
	Total	110	10
Part B	Vocational Skills		
6.	Colours	25	
7.	Graphic Illustration	40	
8.	Page Layout	55	
9.	Design to Print and Visual media	45	
	Total	165	40
Part C	Practical Work		
	Practical Examination	06	15
	Written Test	01	10
	Viva Voce	03	10
	Total	10	35
Part D	Project Work/Field Visit/OJT		
	Practical File/Student Portfolio	10	10
	Viva Voce	05	05
	Total	15	15
	Grand Total	300	100

3. LEARNING OUTCOME BASED ACTIVITIES

Classroom, Laboratory/workshop and field are the key spots where teaching and learning take place. Classroom and laboratory-based teaching and learning facilitate knowledge creation whereas field visits open venues for free interaction with experts and also helps acquaint learners with various tools, materials, equipment procedures and operations in the workplace. While considering these intensified ways of knowledge acquisition, emphasis should also be laid on the occupational safety, health and hygiene of the participants.

Classroom activities

Classroom activities are mainly interactive lecture sessions, followed by discussions and doubt clarifications. Classes are handled by trained vocational teachers and this is considered as an integral part of the course. The most attractive feature of the class is that the classes are in tune with the outcome-based curriculum. Teaching learning processes are well planned and implemented. Teaching learning materials such as audio-visual materials, colour slides, charts, diagrams, models, exhibits, handouts, on-line teaching materials etc., have been incorporated in accordance with the topic and this may help the teachers to impart the content in an effective manner.

Practical work in Laboratory / Workshop

Practical work is usually performed to enhance the skills of the learners which are indeed essential for them to become specialized technicians. Practical sessions may include hands on training, simulation training, role-play, case-based studies and exercises. Equipment and other appliances are available for use in abundance. Trained personnel teach and exercise specialized techniques. Practical classes involving laboratory/workshop are well planned with tools, equipment, materials and also other skill acquisition activities. Vocational teachers should submit the plan of laboratory/workshop work in advance to the head of the institution and get it sanctioned prior to use.

Field visits/ Educational Tour

Field visit is one of the ways and means of learning outside the classroom. It promotes knowledge acquisition by giving opportunity to learners to interact with renowned experts and to make observations of the activities performed by them. An observation check list may help the students to ensure the collection of required information and its analysis for further use. This may be developed with the help of vocational teachers who are in charge of outdoor learning activities. All the field visits are well planned by taking into consideration of the learning requirements, distance to travel, time, health and hygiene. The principal and teachers should plan to implement at least three field visits within a year by making all necessary arrangements.

Virtual Field Visits, Expert Interactions and Practical Activities

With the rapid potentials offered by information technology in digital classrooms, the extent of virtual field visits, online expert interactions and online demonstrations cum practical activities can be worked out. It may be helpful amid the current Covid 19 pandemic scenario. A State level cluster of teachers and experts in the concerned subject can be pooled together for the purpose. The guidelines for such activities can be issued by the concerned SCERTs.

Suggested Topics for Experts Interaction

1. Logo designers
2. Artists
3. Freelance Cover designers (Books, Magazines. Catalogues etc.)
4. Photographers in specialised area
5. Publishers/ Publishing experts
6. Designers of fonts
7. Typesetters/ DTP operators
8. Creative artists and content writers from advertisement fields

4. ASSESSMENT AND CERTIFICATION

The National Skill Qualification Framework (NSQF) is based on outcomes rather than inputs referred by the National Occupation Standards (NOSs). Learning outcomes, as per the NSQF level descriptors, include the Process, Professional Knowledge, Professional Skills, Core Skills and Responsibility. Knowledge in the job of a learner shall be the basis of assessment. It would also be considered if the learning program undertaken by the learner has delivered the required output. Certification is based on required standards so that the learner and the employer could come to know about the competency attained in the vocational subject/ course. In order to make the assessment reliable, valid, flexible, convenient, cost effective, fair and transparent standardised assessment tools are to be used. Technology assisted assessment process is in vogue now.

Knowledge Assessment (Theory)

Knowledge Assessment usually includes two components – Internal Assessment and External Assessment. External assessment includes theory examination conducted by the concerned examination Boards. Tools for assessment contain components for testing the application of knowledge. Knowledge testing can be performed by making use of either objective or short answer type paper-based test. Source of the questions should be the content of the curriculum.

Written Test

A group, comprising of academicians, experts from existing vocational subject experts / teachers, subject experts from University/ College or from the industry prepare theory question paper for the vocational subjects. A panel of experts for question paper setting and conducting examination should be formed by the respective central / state boards. Written tests allow the learners to demonstrate that they have acquired the necessary knowledge and skill in the given topics.

The blue print for the question paper may be as follows:

Duration: 3 hrs

Maximum scores: 50

No. of Questions					
	Typology of Question	Very Short Answer (1 score)	Short Answer (2 scores)	Long Answer (3 scores)	Scores
1.	Remembering – (Knowledge based simple recall questions, to know specific facts, terms, concepts, principles, or theories; identify, define or recite, information)	3	3	3	18
2.	Understanding – (Comprehension – to be familiar with meaning and to understand conceptually, interpret, compare, contrast, explain, paraphrase, or interpret information)	2	4	3	19
3.	Application – (Use abstract information in concrete situation, to apply knowledge to new situations: Use given content to interpret a situation, provide an example, or solve a problem)	0	2	1	07
4.	High Order Thinking Skills – (Analysis and Synthesis – Classify, compare, contrast, or differentiate between different pieces of information; Organize and/ or integrate unique pieces of information from a variety of sources)	0	2	0	04
5.	Evaluation – (Appraise, judge, and/or justify the value or worth of a decision or outcome, or to predict outcomes based on values)	0	1	0	02
	Total	5x1=5	12x2=24	7x3=21	50 (24 questions)

Skill Assessment (Practical)

Skill assessment should be done by considering the practical demonstration of skills by the candidate. It is assessed by making use of a competency checklist prepared by experts. The competency checklist should be developed as per the National Occupation Standards (NOSs). This

should be in tune with the qualification pack for the Job Role to ensure necessary consistency in the quality of assessment across different sectors and institutions. As per the performance criteria defined in the National Occupation Standards, the students have to demonstrate their competencies in front of the examiners. Assessment will indicate whether they are competent or incompetent. The assessors assessing the skills of the students should possess enough industrial experience and should have undergone a rigorous training in assessment principles and practices. The Sector Skill Councils (SSCs) should ensure that the assessors are given the required training on the assessment of competencies.

The demonstration of knowledge and skill in performing a task of the learners, is the purpose of the practical examination. This include practical examination where hands on experience will be displayed and a viva voce. A team of two evaluators, one a subject teacher and the other an expert from the relevant industry certified by the relevant Board or SSCs concerned can conduct practical examination as well as viva voce.

Project Work

Project is an efficient strategy to assess the practical skills acquired along a certain timeline. Project is chosen and given to candidates only on the basis of their capabilities, because it needs specific skills. It is performed step by step and the first and foremost step is classroom discussion and selection of the topic for the project. After fixing the topic and objectives, the methodology of the project work should be decided during the classroom discussions. Monitoring and evaluation should be done at each stage. Proper feedback shall be provided to the learners for improvement and innovation. Field visits can be organized as part of the project work. The data collected may be used for presentations and report writing. Accuracy of the data is to be ensured. The entire project work is maintained as a practical work file or as student's portfolio.

Student Portfolio

It is a document that supports the candidate claim of competencies acquired as a part of the teaching learning process. The student portfolio is a compilation of project reports, articles, photos of products prepared by the student.

Viva Voce

Viva voce provides chance to each candidate to demonstrate communication skills and content knowledge. It is a way of obtaining feedback on the student's experience, learning, project work and field visit. Audio visual recording of the whole procedure can be done for future reference and documentation. A Board, including external examiners, is constituted as per the norms which in turn should be suitably adapted to the specific requirement of the vocational subjects.

The central/state examination board for secondary education and the respective Sector Skill Councils can certify the competencies of the learner upon the successful completion of the course.

5 UNIT CONTENTS

CLASS 11

Part A: Employability Skills

Sl.No.	Units	Duration (hrs)
1.	Communication Skills- III	25
2.	Self-management Skills – III	25
3.	Information and Communication Technology Skills - III	20
4.	Entrepreneurial Skills – III	25
5.	Green Skills – III	15
	Total	110

Unit 1: Communication Skill– III			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Demonstrate knowledge of various methods of communication	<ul style="list-style-type: none"> - Methods of communication • Verbal • Non-verbal • Visual 	<ul style="list-style-type: none"> • Writing pros and cons of written, verbal and non-verbal communication • Listing do's and don'ts for avoiding common body language mistakes 	05
2. Identify specific communication styles	<ul style="list-style-type: none"> • Communication styles- assertive, aggressive, passive-aggressive, submissive, etc. 	<ul style="list-style-type: none"> • Observing and sharing communication styles of friends, teachers and family members and adapting the best practices • Roleplays on communication styles. 	10
3. Demonstrate basic writing skills	<ul style="list-style-type: none"> - Writing skills to the following: • Sentence • Phrase • Kinds of Sentences • Parts of Sentence • Parts of Speech • Articles • Construction of a Paragraph 	<ul style="list-style-type: none"> • Demonstration and practice of writing sentences and paragraphs on topics related to the subject 	10
Total			25

Unit 2: Self-Management – III			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Demonstrate impressive appearance and grooming	<ul style="list-style-type: none"> Describe the importance of dressing appropriately, looking decent and positive body language Describe the term grooming Prepare a personal grooming checklist Describe the techniques of self- exploration 	<ul style="list-style-type: none"> Demonstration of impressive appearance and groomed personality Demonstration of the ability to self-explore 	10
2. Demonstrate team work skills	<ul style="list-style-type: none"> Describe the important factors that influence in team building Describe factors influencing team work 	<ul style="list-style-type: none"> Group discussion on qualities of a good team Group discussion on strategies that are adopted for team building and team work 	10
3. Apply time management strategies and techniques	<ul style="list-style-type: none"> Meaning and importance of time management – setting and prioritizing goals, creating a schedule, making lists of tasks, balancing work and leisure, using different optimization tools to break large tasks into smaller tasks. 	<ul style="list-style-type: none"> Game on time management Checklist preparation To-do-list preparation 	05
Total			25

Unit 3: Information and Communication Technology - III			
Expected Learning Outcome	Theory (08 hrs)	Practical (12 hrs)	Duration (20 hrs)
1. Create a document on word processor	<ul style="list-style-type: none"> Introduction to word processing. Software packages for word processing. Opening and exiting the word processor. Creating a document 	- Demonstration and practice of the following: <ul style="list-style-type: none"> Listing the features of word processing Listing the software packages for word processing Opening and exit the word processor Creating a document 	10
2. Edit, save and print a document in word processor	<ul style="list-style-type: none"> Editing text Wrapping and aligning the text Font size, type and 	- Demonstration and practising the following: <ul style="list-style-type: none"> Editing the text Word wrapping and 	10

	<ul style="list-style-type: none"> face Header and Footer Auto correct Numbering and bullet Creating table Find and replace Page numbering Printing document Saving a document in various formats 	<ul style="list-style-type: none"> alignment Changing font type, size and face Inserting header and footer Removing header and footer Using autocorrect option Insert page numbers and bullet Save and print a document 	
Total			20

Unit 4: Entrepreneurial Skills – III			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Describe the significance of entrepreneurial values and attitude	<ul style="list-style-type: none"> Values in general and entrepreneurial values Entrepreneurial value orientation with respect to innovativeness, independence, outstanding performance and respect for work 	<ul style="list-style-type: none"> Listing of entrepreneurial values by the students. Group work on identification of entrepreneurial values and their roles after listing or reading 2-3 stories of successful entrepreneur Exhibiting entrepreneurial values in Ice breaking, rapport building, group work and home assignments 	10
2. Demonstrate the knowledge of attitudinal changes required to become an entrepreneur	<ul style="list-style-type: none"> Attitudes in general and entrepreneurial attitudes Using imagination/intuition Tendency to take moderate risk Enjoying freedom of expression and action Looking for economic opportunities Believing that we can change the environment Analyzing situation and planning action Involving in activity 	<ul style="list-style-type: none"> Preparing a list of factors that influence attitude in general and entrepreneurial attitude Demonstrating and identifying own entrepreneurial attitudes during the following micro lab activities like thematic appreciation test Preparing a short write-up on “who am I” Take up a product and suggest how its features can be improved Group activity for suggesting brand names, names of enterprises, etc. 	15
Total			25

Unit 5: Green Skills – III			
Expected Learning Outcome	Theory (07 hrs)	Practical (08 hrs)	Duration (15 hrs)
1. Describe importance of main sector of green economy	<ul style="list-style-type: none"> Main sectors of green economy- E-waste management, green transportation, renewal energy, green construction, water management Policy initiatives for greening economy in India 	<ul style="list-style-type: none"> Preparing a poster on any one of the sectors of green economy Writing a two-page essay on important initiatives taken in India for promoting green economy 	08
2. Describe the major green Sectors/Areas and the role of various stakeholder in green economy	<ul style="list-style-type: none"> Stakeholders in green economy Role of government and private agencies in greening cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries 	<ul style="list-style-type: none"> Preparing posters on green Sectors/Areas: cities, buildings, tourism, industry, transport, renewable energy, waste management, agriculture, water, forests and fisheries 	07
Total			15

PART B: VOCATIONAL SKILLS

Sl.No.	Units	Duration (hrs)
1.	Introduction to Graphic Designing	35
2.	Graphic Visualization	40
3.	Graphic Design Tools	40
4.	Design Techniques	40
5.	Maintain workplace health & safety	10
	Total	165

Unit 1: Introduction to Graphic Designing			
Expected Learning Outcome	Theory (15 hrs)	Practical (20 hrs)	Duration (35 hrs)
1. Identify hardware and software for graphic designing	<ul style="list-style-type: none"> Hardware & Software requirements for Graphic Designing 	<ul style="list-style-type: none"> Familiarisation of Hardware requirements and Software for Graphic design, Software installation. 	7
2. Demonstrate Computer networks and list out different types of printers	<ul style="list-style-type: none"> Types of Computer Networks-Server, Client, Connecting media Printers-Different 	<ul style="list-style-type: none"> Connecting cables. Sample networking, device sharing Different types of networks – mainly LAN 	7

	types of printers used in the industry	<ul style="list-style-type: none"> • Create a network of 4 computers + 1 printer + 1 scanner • Identification & use of different types of printers 	
3. Demonstrate Data transfer methods	<ul style="list-style-type: none"> • http/www transfer • Wi-Fi • Bluetooth • FireWire 	<ul style="list-style-type: none"> • Working of file transfers • File transfer using different types of networks. • Sending and receiving through Bluetooth, WIFI, http 	5
4. Explain the basics of Graphic design	<ul style="list-style-type: none"> • Graphic design – Definition • Principles of Design • Purpose • Types 	<ul style="list-style-type: none"> • Sample design collections • Design principles: - Balance, contrast, harmony etc. • Understanding of differences while changing design elements. 	6
5. Create the work flow in design process	<ul style="list-style-type: none"> • Idea and concept • Creative work • Creative production • Industrial production • Publish the work (print, web, visual media, etc) • Product delivery 	<ul style="list-style-type: none"> • Collect sample designs • Plan a job 	4
6. Demonstrate background of media and entertainment industry	<ul style="list-style-type: none"> • Products of Graphic design (Print-media, Advertisement. - Media, visual media, web media, etc) 	Identify- <ul style="list-style-type: none"> • Print Advertising-Visiting cards, Brochure, Catalogues, booklets, albums, Flyer, etc. • Outdoor advt.- Hoardings, banner, Vehicle wraps, etc • Digital advt. for internet and digital services 	6
Total			35

Unit 2: Graphic Visualisation			
Expected Learning Outcome	Theory (15hrs)	Practical (25 hrs)	Duration (40 hrs)
1. Identify Font families & Point system	<ul style="list-style-type: none"> • Fonts • Font families • Font Sizes 	<ul style="list-style-type: none"> • Fonts • Type • Type size Practicing the above using sample text	9
2. Practice Word processing and Word processing software	<ul style="list-style-type: none"> • Word processing • Typesetting • Size • Spacing Alignment 	<ul style="list-style-type: none"> • Practice typing& Fingering practice • Text typing • Formatting text • Paragraph setting 	12

		<ul style="list-style-type: none"> • Column work, Table creation etc. 	
3	.Identify the parts of Typeface and Font	<ul style="list-style-type: none"> • Stroke • Serif • Stress • Parts of type 	<ul style="list-style-type: none"> • Parts of Type • Drawing different fonts by hand. <p>9</p>
4.	Develop skill in Typesetting work using any Word processing software in English & Regional language	<ul style="list-style-type: none"> • Point system • Modern Type setting • Typing-English & Regional language 	<ul style="list-style-type: none"> • Typesetting English • Typesetting Regional language • Typesetting a letter • Typesetting 2 & 3 column works. • Typesetting with Table and picture inserts <p>10</p>
Total			40

Unit 3: Graphic Design Tools			
Expected Learning Outcome	Theory (15 hrs)	Practical (25 hrs)	Duration (40 hrs)
1. Apply Image input methods	<ul style="list-style-type: none"> • Images for printing • Types of originals- Line originals • Tone Originals • Image input using Scanners • Types of scanners • Image from stock photo websites like shutter stock, Creative commons, Pixels, etc. • Image manipulation • Cropping, Scaling 	<ul style="list-style-type: none"> • Identifying different types of originals • Scanning – basics • Scanning a line art and a photograph • Saving in different formats • Download images from stock websites • Input from the Web • Stock photo websites • Keyword search • Resolution of picture • Methods of payment • Downloading copyright free images 	12
2. Art and Science of Imaging	<ul style="list-style-type: none"> • Basic components of digital camera • Image formation -ISO, Shutter speed, Aperture • Photo composition techniques and framing 	<ul style="list-style-type: none"> • Digital SLR camera demonstration • Digital SLR camera Practise • Camera parts • Interchanging a lens • Light sensitivity and ISO • Aperture and its effects • Shutter speed and its importance • Capturing images with 	15

		<ul style="list-style-type: none"> different values of ISO • Rule of third 	
3. Identify various image formats	<ul style="list-style-type: none"> • Image Formats- JPEG, TIFF, BMP, PSD, GIF, PDF, EPS, PS, AI, CDR, RAW etc. 	<ul style="list-style-type: none"> • Selection of designs in various file formats Effects of formats in different modes – in print and on screen 	13
Total			40

Unit 4: Design Techniques			
Expected Learning Outcome	Theory (15hrs)	Practical (25hrs)	Duration (40hrs)
1. Use raster and vector software for designing	<ul style="list-style-type: none"> • Raster & Vector software • Types of images- Continuous tone and line art 	<ul style="list-style-type: none"> • Practise Image editing software (Raster) and Vector based drawing software tools. • Image editing software basics. • Different menus, file properties etc. • Resolution, colour mode, background etc. • Vector based drawing software basics. 	10
2. Explain Image editing methods	<ul style="list-style-type: none"> • Cropping, scaling, colour level adjustments, photo retouching, restoration, gray scaling 	<ul style="list-style-type: none"> • Image editing practice • Cropping, scaling, colour level adjustments, photo re-touching, damaged photo restoration, gray scaling etc. 	9
3. Develop skill in Design	<ul style="list-style-type: none"> • Production of dummies and layout 	<ul style="list-style-type: none"> • Create Newspaper advertisement, Book cover, Flyer, Photo album, Table top calendar in Image editing software • Create Company Logo for print and visual media, Id card, Badge etc. using vector-based drawing software 	10
4. Develop skill in Conversion of design file to different file formats for publishing	<ul style="list-style-type: none"> • Conversion of file to different formats (PDF, JPEG, ZIP, TIFF, etc) 	<ul style="list-style-type: none"> • File conversion to different formats 	11
Total			40

Unit 5: Maintain workplace health and safety			
Expected Learning Outcome	Theory (5hrs)	Practical (5 hrs)	Duration (10 hrs)
1. Identify the organisation's current health, safety and security policies and procedures	<ul style="list-style-type: none"> • Organisation's emergency procedures for accidents, fires or any other natural calamity in case of a hazard • Security signals eg. fire alarms and places such as staircases, fire warden stations, first aid and medical rooms • Organisation's health policies 	<ul style="list-style-type: none"> • Practice emergency procedures • Familiarise security signals • Participate in organization health and safety knowledge sessions and drills 	5
2. Identify and document health risks in work place and follow precautionary measures	<ul style="list-style-type: none"> • Potential risks like sitting postures while using computer, eye fatigue and other hazards in the workplace • Posture and position to minimize fatigue and the risk of injury • Personal health and safety, and that of others in the workplace through precautionary measures • First aid kit and first aid procedures. 	<ul style="list-style-type: none"> • Document potential risks like sitting postures while using computer, eye fatigue and other hazards in the workplace • Practice first aid procedures 	5
Total			10

CLASS 12

Part A: Employability Skills

Sl.No.	Units	Duration (hrs)
1.	Communication Skills- IV	25
2.	Self-management Skills - IV	25
3.	Information and Communication Technology Skills - IV	20
4.	Entrepreneurial Skills – IV	25
5.	Green Skills – IV	15
	Total	110

Unit 1: Communication Skills - IV			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Describe the steps to active listening skills	<ul style="list-style-type: none"> • Importance of active listening at workplace • Steps to active listening 	<ul style="list-style-type: none"> • Demonstration of the key aspects of becoming active listener • Preparing posters of steps 	10

		for active listening	
2. Demonstrate basic writing skills	<ul style="list-style-type: none"> - Writing skills to the following: <ul style="list-style-type: none"> • Sentence • Phrase • Kinds of Sentences • Parts of Sentence • Parts of Speech • Articles • Construction of a Paragraph 	<ul style="list-style-type: none"> • Demonstration and practice of writing sentences and paragraphs on topics related to the subject 	15
Total			25

Unit 2: Self-Management Skills – IV			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Describe the various factors influencing self-motivation	<ul style="list-style-type: none"> • Finding and listing motives (needs and desires); • Finding sources of motivation and inspiration (music, books, activities); expansive thoughts; living fully in the present moment; dreaming big 	<ul style="list-style-type: none"> • Group discussion on identifying needs and desire • Discussion on sources of motivation and inspiration 	10
2. Describe the basic personality traits, types and disorders	<ul style="list-style-type: none"> • Describe the meaning of personality • Describe how personality influence others • Describe basic personality traits • Describe common personality disorders- paranoid, antisocial, schizoid, borderline, narcissistic, avoidant, dependent and obsessive 	<ul style="list-style-type: none"> • Demonstrate the knowledge of different personality types 	15
Total			25

Unit 3: Information and Communication Technology Skills– IV			
Expected Learning Outcome	Theory (06 hrs)	Practical (14 hrs)	Duration (20Hrs)
1. Perform tabulation using spreadsheet application	<ul style="list-style-type: none"> • Introduction to spreadsheet application • Spreadsheet applications 	<ul style="list-style-type: none"> - Demonstration and practice on the following: <ul style="list-style-type: none"> • Introduction to the 	10

	<ul style="list-style-type: none"> • Creating a new worksheet • Opening workbook and entering text • Resizing fonts and styles • Copying and moving • Filter and sorting • Formulas and functions • Password protection. • Printing a spreadsheet. • Saving a spreadsheet in various formats. 	<p>spreadsheet application</p> <ul style="list-style-type: none"> • Listing the spreadsheet applications • Creating a new worksheet • Opening the workbook and enter text • Resizing fonts and styles • Copying and move the cell data • Sorting and Filter the data • Applying elementary formulas and functions • Protecting the spreadsheet with password • Printing a spreadsheet • Saving the spreadsheet in various formats. 	
2. Prepare presentation using presentation application	<ul style="list-style-type: none"> • Introduction to presentation • Software packages for presentation • Creating a new presentation • Adding a slide • Deleting a slide • Entering and editing text • Formatting text • Inserting clipart and images • Slide layout • Saving a presentation • Printing a presentation document. 	<p>- Demonstration and practice on the following:</p> <ul style="list-style-type: none"> • Listing the software packages for presentation • Explaining the features of presentation • Creating a new presentation • Adding a slide to presentation. • Deleting a slide • Entering and edit text • Formatting text • Inserting clipart and images • Sliding layout • Saving a presentation • Printing a presentation document 	10
Total			20

Unit 4: Entrepreneurial Skills – IV			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Identify the general and entrepreneurial behavioural	<ul style="list-style-type: none"> • Barriers to becoming entrepreneur • Behavioural and entrepreneurial 	<ul style="list-style-type: none"> • Administering self- rating questionnaire and score responses on each of the competencies 	10

competencies	<p>competencies – adaptability/</p> <ul style="list-style-type: none"> • decisiveness, initiative /perseverance, interpersonal skills, organizational skills, stress management, valuing service and diversity 	<ul style="list-style-type: none"> • Collect small story/ anecdote of prominent successful entrepreneurs • Identify entrepreneurial competencies reflected in each story and connect it to the definition of behavioural competencies • Preparation of competencies profile of students 	
2. Demonstrate the knowledge of self-assessment of behavioural competencies	<ul style="list-style-type: none"> • Entrepreneurial competencies in particular: self-confidence, initiative, seeing and acting on opportunities, concern for quality, goal setting and risk taking, problem solving and creativity, systematic planning and efficiency, information seeking, persistence, influencing and negotiating, team building 	<ul style="list-style-type: none"> • Games and exercises on changing entrepreneurial behaviour and development of competencies for enhancing self-confidence, problem solving, goal setting, information seeking, team building and creativity 	15
Total			25

Unit 5: Green Skills – IV

Expected Learning Outcome	Theory (05 hrs)	Practical (10 hrs)	Duration (15 hrs)
1. Identify the role and importance of green jobs in different sectors	<ul style="list-style-type: none"> • Role of green jobs in toxin-free homes, • Green organic gardening, public transport and energy conservation, • Green jobs in water conservation • Green jobs in solar and wind power, waste reduction, reuse and recycling of wastes, • Green jobs in green tourism • Green jobs in building and construction • Green jobs in appropriate technology • Role of green jobs in Improving energy and raw materials use 	<ul style="list-style-type: none"> • Listing of green jobs and preparation of posters on green job profiles • Prepare posters on green jobs. 	15

	<ul style="list-style-type: none"> • Role of green jobs in limiting greenhouse gas emissions • Role of green jobs minimizing waste and pollution • Role of green jobs in protecting and restoring ecosystems • Role of green jobs in support adaptation to the effects of climate change 		
Total			15

Part B–Vocational Skills

Sl.No.	Units	Duration (hrs)
1.	Colours	25
2.	Graphic Illustration	40
3.	Page Layout	55
4.	Design to Print and Visual media	45
Total		165

Unit 1: Colours			
Expected Learning Outcome	Theory (10 hrs)	Practical (15 hrs)	Duration (25 hrs)
1. Explain the basic concept of colour	<ul style="list-style-type: none"> • Light and colour • Electromagnetic spectrum • Eye and Colour • Colour theory • Additive & Subtractive colour formation 	<ul style="list-style-type: none"> • Familiarizing colour pallets used in various publishing software 	7
2. Explain colour psychology	<ul style="list-style-type: none"> • Warm colour • Cool colour • Neutral colour • Hue • Saturation • Brightness 	<ul style="list-style-type: none"> • Identify Warm colour, Cool colour and Neutral colour in a printed product • Adjust the Hue, Saturation and Brightness of an image 	5
3. Identify Colours for Printing	<ul style="list-style-type: none"> • Spot Colour • Spot colour system PANTONE & HKS • Fake Colour, Duotone, Tritone, Process Colour, Hi Fidelity Printing • Colour Models • CMYK, RGB • RGB to CMYK conversion and vice versa 	<ul style="list-style-type: none"> • Colour models • Convert image from RGB to CMYK • Convert CMYK/RGB to greyscale • Visit a printing plant and identify the colour management system 	5

4. Demonstrate colour separation process	<ul style="list-style-type: none"> • Basic Colour Separation Theory • Colour Filters • Screen Angle • Electronic Colour Separation • Colour Correction- UCR, GCR 	<ul style="list-style-type: none"> • Creating a colour separation display of an image on your system using different channel of Cyan, Magenta, Yellow and Black. • Colour separation of an original using a scanner. 	8
Total			25

Unit 2: Graphic Illustration			
Expected Learning Outcome	Theory (18 hrs)	Practical (22 hrs)	Duration (40 hrs)
1. Recognise Basics of vector based Illustrating Software	<ul style="list-style-type: none"> • Basic Tools & techniques 	<ul style="list-style-type: none"> • Drawing • Colouring objects • Gradients • Mesh, symbols organizing with layers, using effects and transparency • Importing files in different formats • Filters, blending techniques • Managing appearance • Exporting and saving files 	18
2. Apply Graphic Interface for illustration	<ul style="list-style-type: none"> • Introduction • The Working Place • Customizing • Layer and layer options • Pen, Pencils and Paths • Using the Brush and Paint • Specialized Tools • Getting Creative with Types • Using the Symbols • Effects and Filters • Playing with Palettes • Exporting 	<ul style="list-style-type: none"> • Create Visiting Card Envelope, Letter head, Logo, Trademark, Identity Card, CD Cover, Labels, Cartoons, Icons, etc. • Export/save file in different formats (PDF, BMP, JPEG, GIFF, PSD, PNG, TIFF, Text) 	22
Total			40

Unit 3: Page Layout			
Expected Learning Outcome	Theory (20 hrs)	Practical (35 hrs)	Duration (55hrs)
1. Create Page layout using Page layout	<ul style="list-style-type: none"> • Planning the job • Traditional Image Assembly 	<ul style="list-style-type: none"> • Building document • Working with master pages • Working with text and type 	20

software	<ul style="list-style-type: none"> • Font formats • Design settings • Margins • Page Layout • Proofing • Proof reading marks • Column Setting (Newspaper, Magazine) • PDF file creation 	<ul style="list-style-type: none"> • Working with styles, graphics • Creating and using tables • Design (Brochure, Magazine cover, Flyer, Book Cover, Desk Calendar, Menu card, Newsletter, Newspaper Advertisement, banner, etc. • Practice Proof reading marks • Export to PDF 	
2. Create and analyse different Imposition schemes	<ul style="list-style-type: none"> • Types of Imposition (Sheet wise, Work and Turn, Work and Tumble, Signature, Ganged imposition) • Multiple-ups Imposition • Automatic Imposition Software 	<ul style="list-style-type: none"> • Prepare 8-page, 16-page Sheet wise imposition manually • Create multiple-ups imposition • Automatic page Imposition during field visit 	20
3. Identify Digital Pre- press workflow & Output	<ul style="list-style-type: none"> • Workflow • Pre-flighting • Production Proofs • Digital Pre-Press Output • Output to Film • Image carriers for printing-Offset, Flexography, Digital etc. 	<ul style="list-style-type: none"> • Identify products • Print Advertising-Visiting cards, Brochure, Catalogues, booklets, albums, etc. • Outdoor advt.- Hoardings, banner, Vehicle wraps, etc. • Digital advt. for internet and digital services 	15
Total			55

Unit 4: Design to Print and Visual media			
Expected Learning Outcome	Theory (18 hrs)	Practical (27 hrs)	Duration (45 hrs)
1. Application of Graphic Design in Print industry	<ul style="list-style-type: none"> • Books • Magazines • Brochures • Newspapers • Flex • 3D printing • Textile Industry • Other Print media 	<ul style="list-style-type: none"> • Design Brochure, Poster, Notice, Banner, Flex, etc • Field visit 	12
2. Identify various Printing process	<ul style="list-style-type: none"> • Offset • Digital -Inkjet -Dye-sublimation -Electrophotography • Flexography 	<ul style="list-style-type: none"> • Field visit 	6

	<ul style="list-style-type: none"> • Gravure 		
3. Identify Graphic Design for Packaging	<ul style="list-style-type: none"> • Role of Packaging • Study of various package designs in the market • Product branding 	<ul style="list-style-type: none"> • Design for Cartons, Tubes, Blister Packets • Fieldvisit Packaging firm 	10
4. Explain Publishing	<ul style="list-style-type: none"> • Book Publishing • Publishing to Web • E-publishing 	<ul style="list-style-type: none"> • Create a Design for Web page • Create a dummy Book • Field visit to a Publishing house. 	7
5. Application of graphic design in visual media	<ul style="list-style-type: none"> • Introduction to visual media • Influence of Graphic design in visual media • Design for Web, Advertisement, Film, TV Channels 	<ul style="list-style-type: none"> • Create a design/advt. for Social media & Website • Edit video by inserting a graphic image 	10
TOTAL			45

6. ORGANISATION OF FIELD VISITS/ON-THE-JOB TRAINING

In a year, at least 3 field visits/educational tours should be organized for the students to expose them to the activities in the workplace. In field visits, children will go outside the classroom to obtain specific information from experts or to make observations of the activities. A checklist of observations to be made by the students during the field visits should be developed by the Vocational Teachers for systematic collection of information by the students on the various aspects. Principals and Teachers should identify the different opportunities for field visits within a short distance from the school and make necessary arrangements for the visits.

Field visits/educational tours should be organized for the students to expose them to the activities in the workplace. Visit a nearby Graphic design hub and observe the following:

Types of Design products produced there, design production work-flow, different departments, pre-press activities. Students should be exposed to work situations and latest trends and developments in this area of communication. Suggested field visit centres

1. Leading newspaper companies
2. Commercial presses
3. Packaging presses
4. Government presses
5. Advertising firms

The collaboration between schools and industries is very important in vocational education, which aims to impart employable competencies in the students in this unique stream of education. Even though practical training can be provided in the vocational school itself, it could not simulate the real work environment for the students due to lack of proper layout, equipment, raw materials, storage space, sufficiently skilled and experienced instructors etc. in the school. The correct and proper flow of activities involved in a job could never be simulated in a school even if we provide all the above necessary ingredients in the school, which also will involve heavy investment. Theoretical knowledge as well as practical experience is necessary for the execution of an industrial job or process. The theoretical knowledge could be imparted in school but the necessary practical skill could only be effectively imparted through exposure to the real work environment i.e. industry. This could be achieved through “On the Job Training” (OJT). Minimum 80 hrs of OJT training is essential to acquire skill level as per the prescribed performance criteria for the course. Four days On the Job Training (OJT) is recommended for this job role during first year may be carried out depending upon the availability of the OJT centres probably during September- October.

7. LIST OF EQUIPMENT AND MATERIALS

The list given below is suggestive and an exhaustive list should be prepared by the vocational teacher. Only basic tools, equipment and accessories should be procured by the Institution so that the routine tasks can be performed by the students regularly for practice and acquiring adequate practical experience.

1	Desktop /Laptop computers
2	Digital colour laser Printers A3
3	High resolution scanner
4	Word Processing software
5	Regional language typing software
6	Design software Vector based
7	Design Software Raster based
8	Illustration software
9	Page Layout software
10	Video Editing software

8. LIST OF CONTRIBUTORS

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