

STUDY & EVALUATION SCHEME FOR CERTIFICATE PROGRAMME IN SEWING MACHINE OPERATOR

Code	Units	Study Scheme Total Hrs		Credits	Marks Evaluation Scheme								Total Marks
					Internal Assessment			External Assessment					
		Th	Pr		Th	Pr	Total	Th	Hrs	Pr	Hrs	Total	
CSEO-101	*Communication Skill	8	24	1	25	25	50	25	1	50	3	75	125
CSEO-102	Fundamentals of fabrics & preparation for cutting	24	64	3	25	50	75	50	2	100	4	150	275
CSEO-103	Sewing Machines – Basics & Overlock with aids	32	96	4	25	50	75	50	2	100	4	150	225
CSEO-104	Variety of techniques in garment making	32	124	6	25	75	100	50	2	100	4	150	250
CSEO-105	Trims - application in garments and sample making	16	92	6	25	75	100	50	2	100	4	150	250
CSEO-106	#Student Centre Activity		48	2	---	25	25	---	---	---	---	---	25
CSEO-107	+ 4 – week industrial training at the end of semester	---	---	4	----	---	---	---	---	100	3	100	100
TOTAL		112	448	26	150	300	450	225	---	550	---	775	1250

*Common with other certificate programmes.

SCA will comprise of co-curricular activities like extension lectures on entrepreneurship, energy conservation, environment, sports, hobby club, such as, photography, etc., seminars, declamation contest, educational field visits, NCC, NSS, cultural activities, etc.

+ Industrial Training

Before completion of the semester, the students will go for training in a relevant industry/ field organisation for a minimum period of 4 weeks and prepare a diary. The student will prepare a report at the end of training. This report will be evaluated by the concerned instructor in the presence of one industry representative from the relevant trade/ field.

Total weeks per semester: 16, Total working days per week: 5, Total hours per day: 7, Total hours in a semester: 16x5x7 = 560

One credit is defined as one hour of lecture per week or two hours of practical per week in the programme.

GUIDELINES FOR ASSESSMENT OF STUDENT CENTRED ACTIVITIES (SCA)

The maximum marks for SCA should be 25. The marks may be distributed as follows:-

- i) 5 marks for general behaviour and discipline
(by Principal or HOD in consultation with the instructor(s)/trainers)
 - ii) 5 marks for attendance as per following
(by the instructors/ trainers of the department)
 - a) Up to 75% Nil
 - b) 75% to 80% 02 marks
 - c) 80% to 85% 03 marks
 - d) Above 85% 05 marks
 - iii) 15 marks maximum for sports/ NCC/ NSS/ Cultural/ Co-curricular activities as per following:
(by In-charge of Sports/ Cultural/ NCC/ NSS/ Co-curricular activities)
 - 15 marks - for National level participation or inter-university competition
 - 10 marks - participation any two of the activities
 - 05 marks - participation at the internal sports of the institute/college/university
- Note: There should be no marks for attendance in the internal sessional of different subjects.

SALIENT FEATURES OF THE PROGRAMME

1	Sector	Tailoring
2	Name of the certificate programme	Sewing machine operator
3	Entry qualification	Matriculation or equivalent NSQF level as prescribed by MRSPTU, Bathinda.
4	Duration of programme	Six (6) months
5	Intake	30
6	Pattern of programme	Semester pattern
7	NSQF level	Level III
8	Ratio of theory & practice	20:80

JOB ROLE AND JOB OPPORTUNITIES OF A SEWING MACHINE OPERATOR

JOB ROLE

A sewing machine operator is expected to perform following job roles in industry

- Recognise the fabric materials and fabric types
- Understand the grains, pile directions
- Carry out accurate marking and measurements and cut the fabrics accordingly
- Set the sewing machine that will be used
- Methodically stitch the garments taking proper care of the design and measurements
- Use proper stitches and seams
- Add accessories and embellishments properly
- Possess the concept of overall balance in the design of the garment
- Correctly sew/ join the cut components without distortions
- Mend the garment after manufacturing
- Possess basic concept of the quality of the garment.

JOB OPPORTUNITIES

The clothing and garment making is the basic requirement of human civilisation and exists from the beginning of civilisation. Sewing machine is a widely prevalent simple machine which is seen at every village and nooks of towns. Although most of the sewing machines operate in non-organised sector there are some fairly large garment manufacturing units in the country. A sewing machine operator can find employment in any of the micro, small or large tailoring or garment making establishments.

Another feature of this trade is self-employment or entrepreneurship. A properly trained person can set up his own establishment as the requirement of finance and space is not very high. However, since this trade is widely prevalent, the entrepreneur should have adequate technical and communication skill to survive in the competition.

UNIT-1.1 Subject Code: CSEO-101 COMMUNICATION SKILL	
LEARNING OUTCOMES: After undergoing this unit, the students should be able to • Speak confidently • Overcome communication barriers • Write legibly and effectively • Listen in proper perspective • Read various genres adopting different reading techniques • Respond to telephone calls effectively	
Practical	24 hrs
	Theory 8 hrs Basic communication • Process of communication • Types of communication – formal and informal, oral and written, verbal and non-verbal
Looking up words in dictionary (meaning and pronunciation)	Functional grammar and vocabulary • Parts of speech • Tenses • Correction of incorrect sentences
• Self and peer introduction • Greetings for different occasions	Listening • Meaning and process of listening • Importance of listening • Methods to improve listening skills Speaking • Importance • Methods to improve speaking • Manners and etiquettes
Newspaper reading	Reading • Meaning • Technique of reading – skimming, scanning, intensive and extensive reading
• Vocabulary enrichment and grammar exercises • Exercises on sentence framing accuracy	Functional vocabulary • One word substitution • Commonly used words which are often misspelt • Punctuation • Idioms and phrases
• Reading aloud articles and essays on current and social issues • Comprehension of short paragraph	
• Write short technical report • Letter writing	
• Participate in oral discussion • Respond to telephonic calls effectively	

• Mock interview	
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Means of Assessment

- Assignment and quiz/ class test
- Mid-term and end term written tests
- Laboratory and practical work
- Viva voce

UNIT-1.2 Subject Code: CSEO-102 FUNDAMENTALS OF FABRICS & PREPARATION FOR CUTTING	
Learning Outcomes: After undergoing study of this unit the students will be able to • Correctly and safely handle different tools • Identify different types of fabrics and the weaves • Carry out proper measurements • Accurately cut the fabrics	
Practicals	Theory
64 hrs • Familiarisation of the Institute • Familiarisation with handling of tools • Safety precautions while handling the tools • Identification of fabrics & texture • Handling of fabrics • Collection of different fabric samples with basic weaves • Preparation of fabrics for cutting • Recognition of fabric grain, selvedge and straightening of grains	24 hrs • Trade related tools, their importance, usage and their safety:- Measuring tools, drafting tools, marking tools, cutting tools, sewing tools, finishing tools • Fabric fundamentals like brief idea about fibres, types of fabrics, selection of needles and threads according to fabric types • Broken needle policy • Fabric preparation for cutting: fabric grains, selvedge, shrinkage and straightening of selvedge • Measurements- Units and Measuring techniques.

Means of assessment

- Assignment and quiz/ class tests
- Mid-term and end-term written tests
- Viva – voce
- Practical work

UNIT-1.3 Subject Code: CSEO-103 FUNDAMENTALS OF FABRICS & PREPARATION FOR CUTTING	
Learning outcomes After undergoing the study of this unit the students will be able to • Recognise and understand the functions of critical machine parts in a single needle lock stitch machine and overlock machine • Set up machines with different threads and fabrics • Operate the machines correctly • Understand the faults in machine operation • Carry out basic maintenance work	
Practicals 96 hrs	Theory 32 hrs
Practice on industrial single needle lock stitch machine: • Ergonomic principle of seating on lock stitch machine • Speed control • Practice on paper • Threading on machine • Bobbin winding and loading • Practice on machine • Running on straight line, square, zig-zag line, circles, semi-circle and spiral	Basic sewing machine: • Parts and function • Machine needle • Stitch formation • Sewing machine practice • Care and maintenance • Trouble shooting • Types of industrial sewing machines
Practice on overlock machine: • Threading • Running • Minor adjustments	Over lock machine • Parts and functions • Machine practice • Care and maintenance • Trouble shooting Basic garment analysis
Practice of making seams • Plain seam (straight & curved) with seam finishes • Self-enclosed seam • Top stitched seam • Corded seam • Decorative seam Practice with sewing aids.	Seams • Classification • Uses • Properties • Seam finishes Sewing aids: • Presser foot • Folders • Guides

Means of assessment

- Assignment and quiz/ class tests
- Mid-term and end-term written tests
- Viva – voce
- Practical work

UNIT-1.4 Subject Code: CSEO-104 VARIETY OF TECHNIQUES IN GARMENT MAKING	
Learning Outcomes: After going through this unit the students will be able to make different components of garment • Use proper needles and threads • Efficiently use hand stitches • Correctly make variations in garment decoration	
Practicals	Theory
124 hrs	32 hrs
Making samples of: • Darts • Pleats	Introducing Fullness • Darts – Necessity, types and precaution during stitching • Pleats – necessity, types and uses
Making samples of • Tucks • Gathers and shirrs • Frills	Introducing Fullness • Tucks – Types and uses • Gathering and shirring • Flare • Ruffles/ frills – types (straight and circular) and uses
Practice of hand stitch making and making of simple samples with hand stitch	Hand stitches • Hand needles – size and type • Sewing thread • Types and application of hand stitches
Making samples of • Faced Hem • Edge stitched Hem • Double stitch hem • Band hem • Ease in hem • Mitered hem Practice of corner making • Self-turned • With additional strip	Study of Hems – • Types and uses Corner making • Types and uses
Making samples of • Casing & draw string • Casing with elastic • Casing with heading • Inside applied casing • Outside applied casing	Study of casing • Introduction and uses
Making samples of edge finishing • Biased facing • Combination shaped facing • Outside shaped facing • Shaped facing • Self-facing • Binding	Edge finishing • Facings • Bindings • Pipings

• Piping	
Making samples of different shaped necklines	Necklines • Different shapes of necklines
Making of samples of plackets • Faced plackets • Continuous placket • One-piece placket • Two-piece placket • Two-piece placket with pleat • Zippered placket – Lapped, Fly front, Open end, Visible, Invisible.	Plackets • Types • Sample making
Making samples of different pockets • Patch • Inseam • Cut/ slash	Pockets • Types • Design variation
Samples of making collars	Collars • Classifications • Collar terms
Samples of making sleeves with and without cuff	Sleeves • Classification • Sleeve length variation

Means of assessment

- Assignment and quiz/ class tests
- Mid-term and end-term written tests
- Viva – voce
- Practical work

UNIT-1.5 Subject Code: CSEO-105 TRIMS - APPLICATIONS IN GARMENTS AND SAMPLE MAKING	
Learning Outcomes: After undergoing study of this unit the students will be able to • Recognise the variety in fasteners • Properly fix the fasteners in the garment • Prepare draft and pattern for ladies' suits • Make the complete suit.	
Practicals 92 hrs	Theory 16 hrs
Practice of fixing fasteners, such as buttons, hooks, eyes and press studs. Practice of making button holes by hand. Practice of darning and patching. Stitching of complete ladies' suits after drafting and developing patterns.	Trimmings • Types • Applications • Fixing of buttons, hooks, etc. • Making of button holes Mending • Darning • Patching Drafting and developing patterns for ladies' suits.

Means of Assessment

- Assignment and quiz/ class tests
- Mid-term and end-term written tests
- Viva – voce
- Practical work

SUBJECT CODE: CSEO-107
INDUSTRIAL TRAINING – I (4 Weeks)

The purpose of industrial training is to:

- Develop understanding regarding the size and scale of operations and nature of industrial/field work in which students are going to play their role after completing the courses of study.
- Develop confidence amongst the students through firsthand experience to enable them to use and apply institute based knowledge and skills to perform field activities.
- Develop special skills and abilities like interpersonal skills, communication skills, attitudes and values.

It is needless to emphasize further the importance of Industrial Training of students during their one-year certificate programme. It is industrial training, which provides an opportunity to students to experience the environment and culture of world of work. It prepares students for their future role as skilled person in the world of work and enables them to integrate theory with practice.

An external assessment of 100 marks have been provided in the study and evaluation scheme of 1st Semester. Evaluation of professional industrial training report through viva-voce/presentation aims at assessing students understanding of materials, industrial process, practices in industry/field organization and their ability to engage in activities related to problem solving in industrial setup as well as understanding of application of knowledge and skills learnt in real life situations.

The instructor along with one industrial representative from the concerned trade will conduct performance assessment of students. The components of evaluation will include the following:

- | | |
|-------------------------------|-----|
| a) Punctuality and regularity | 20% |
| b) Industrial training report | 50% |
| c) Presentation and viva-voce | 30% |

RESOURCE REQUIREMENTS

LIST OF TOOLS AND EQUIPMENT

Lab Equipment and Tools

Sr. No.	Name of Item	Quantity
1.	Measuring tape 150 cm	30
2.	Seam Ripper	30
3.	Thimble	30
4.	Tailor's card scale triangular	30
5.	Tailor's square - plastic	30
6.	French curve set of three	30
7.	Thread cutter	30
8.	Scale (plastic) 24 inch	30
9.	Scissors – 25cm	30
10.	Pinking shears	5
11.	Leg shaper - plastic	30
12.	Garment Hangers	30
13.	Screw driver set	4
14.	Table sharpener	4
15.	Pressing table	5
16.	Blanket for pressing	5
17.	Sprayer	5
18.	Waste bin	10
19.	Pattern punch	5
20.	Pattern notcher	5
21.	Pattern hanging stand	4
22.	Water tub	1
23.	Stand for hanging dresses	5
24.	Trial room with 3 side mirrors of size 150cm x 60cm each and arrangement for hanging dresse	1
25.	Electric automatic steam press	5
26.	Sewing machine – single needle lock stitch industrial model	15
27.	Over lock machine – three thread	1
28.	Zig – zag multi-purpose machine	1
29.	Double needle machine	1
30.	Button hole machine	1
31.	Button sewing machine	1
32.	Machine attachment	As per requirement
33.	Chairs with low back rest or stools for the machines	30 nos.
34.	Drafting Tables	10
35.	Display board covered with glass or acrylic sheet 120 cm x 90 cm	2
36.	Instructor Table	1
37.	Instructor chairs	2
38.	Steel Amirah 195x90x60 cm	2

39.	Pigeon hole Amirah with 15 lockers and separate locking arrangement for trainees	2
40.	Calculator – desk type	1
41.	White board with accessories	1
42.	Dummy lady, men kids	1 each

Class Room Furniture

Sr. No.	Name of Item	Quantity
1.	Instructor Table & chair	1 set
2.	Students' chairs with writing pads	30 nos
3	White Board of size 120cm x 90cm	1 no.
4.	LCD Projector with screen	1 set
5.	Lap top for instructor with latest (Vista & above) configuration pre- loaded with operating system and MS office package	1 no.