# THE UNITED REPUBLIC OF TANZANIA MINISTRY OF EDUCATION, SCIENCE AND TECHNOLOGY



# TEXTILE DESIGN AND SMALL-SCALE PRINTING SYLLABUS FOR VOCATIONAL ORDINARY SECONDARY EDUCATION

FORM I-IV

2023

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## **Abbreviations and Acronyms**

- CAD Computer Aided DesignGIMP GNU Image Manipulation ProgramICT Information and Communication Technology
- MoEST Ministry of Education, Science and Technology
- TIE Tanzania Institute of Education

### Acknowledgements

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Keath a.

Dr Aneth A. Komba Director General **Tanzania Institute of Education** 

#### **1.0 Introduction**

Textile Design and Small-Scale Printing is an elective trade for Form I-IV students in the Vocational Ordinary Secondary Education pathway. The purpose of studying Textile Design and Small-Scale Printing is to prepare students to be creative in the field of Arts and Design. It also enables the student with capabilities of creative expression, visual communication and problem-solving. Furthermore, the trade provides deeper understanding and awareness of vocational opportunities both nationally and globally. It also serves as a bridge for students to appreciate their culture and understand diverse cultures so as to relate well with people nationally and internationally.

Textile Design and Small-Scale Printing Syllabus is designed to guide the teaching and learning of Textile Design and Small-Scale Printing at Vocational Ordinary Secondary Education, Form I-IV in the United Republic of Tanzania. The Syllabus interprets the competences indicated in the 2023 Ordinary Secondary Education Curriculum. It provides information that will enable teachers to plan their teaching process effectively. It also facilitate teaching and learning opportunities that guide teachers to apply different methods and strategies to promote students' Textile Design and Small-Scale Printing literacy and develop 21<sup>st</sup> Century skills which include creativity, critical thinking, problem solving, collaboration and communication.

### 2.0 The Main Objectives of Education in Tanzania

The main objectives of education in Tanzania are to enable every Tanzanian to:

- (a) Develop and improve his or her personality so that he or she values himself or herself and develops self-confidence;
- (b) Respect the culture, traditions and customs of Tanzania; cultural differences; dignity; human rights; attitudes and inclusive actions;
- (c) Advance knowledge and apply science and technology, creativity, critical thinking, innovation, cooperation, communication and positive attitudes for his or her own development and the sustainable development of the nation and the world at large;
- (d) Understand and protect national values, including dignity, patriotism, integrity, unity, transparency, honesty, accountability and the national language;
- (e) Develop life and work-related skills to increase efficiency in everyday life;

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- (f) Develop a habit of loving and valuing work to increase productivity and efficiency in production and service provision;
- (g) Identify and consider cross-cutting issues, including the health and well-being of the society, gender equality, as well as the management and sustainable conservation of the environment; and
- (h) Develop national and international cooperation, peace and justice per the Constitution of the United Republic of Tanzania and international conventions.

### 3.0 Objectives of Ordinary Secondary Education

The objectives of Ordinary Secondary Education- Vocational Education, are to:

- (a) Strengthen, broaden and develop a deeper understanding of the knowledge, skills and attitudes developed at the Primary Education level;
- (b) Develop technical and entrepreneurial skills that will enable him/her to employ oneself, to be employed and to manage life by using his/her environment appropriately;
- (c) Safeguard customs and traditions, national unity, national values, democracy, respect for human and civil rights, duties and responsibilities associated with such rights;
- (d) Strengthen communication using language skills;
- (e) Develop self-confidence and the ability to learn in various fields, including science and technology as well as theoretical and technical knowledge;
- (f) Strengthen accountability for cross-cutting social issues, including health, security, gender equality and sustainable environmental conservation; and
- (g) Develop readiness to continue to vocational and technical education.

### 4.0 General Competences for Ordinary Secondary Education

The general competences for Ordinary Secondary Education - Vocational Education are to:

(a) Use the knowledge and skills developed in the Primary Education stage to strengthen and broaden vocational understanding;

- (b) Use the vocational skills in designing, inventing and creating things to manage their lives and solve challenges in society;
- (c) Appreciate citizenship and national values;
- (d) Use language skills;
- (e) Demonstrate self-confidence in learning various fields, including Science and Technology, theoretical and technical knowledge;
- (f) Adhere to safety rules and regulations in the use of vocational tools correctly; and
- (g) Use the knowledge and skills developed for further vocational education and the life of work.

### 5.0 Main and Specific Competences

The main and specific competences to be developed are presented in Table 1.

 Table 1: Main and Specific Competences for Form I-IV

Main competence	Specific competences
1.0 Master Textile Design and Small-Scale Printing	1.1 Master the concepts, principles, elements and techniques of textile
	design and small-scale printing
	1.2 Create textile designs
	1.3 Print and dye fabrics
	1.4 Secure and promote textile designs and products

## 6.0 Roles of Teachers, Students and Parents in Teaching and Learning

A good relationship between a teacher, student and parent or a guardian is fundamental in ensuring successful learning. This section outlines the roles of each participant in facilitating effective teaching and learning of Textile Design and Small-Scale Printing.

#### 6.1 The teacher

The teacher is expected to:

- (a) Help the student to learn and acquire the intended competences in Textile Design and Small-Scale Printing;
- (b) Use teaching and learning approaches that will allow students with different needs and abilities to:
  - (i) develop the competences needed in the 21<sup>st</sup> Century;
  - (ii) actively participate in the teaching and learning process;
- (c) Use student centred instructional strategies that make the student a centre of learning which allow them to think, reflect and search for information from various sources;
- (d) Create a friendly teaching and learning environment;
- (e) Prepare and improvise teaching and learning resources;
- (f) Conduct formative assessment regularly by using tools and methods which assess theory and practice;
- (g) Treat all the students equally irrespective of their differences;
- (h) Protect the student while at school;
- (i) Keep track of the student's daily progress;
- (j) Identify individual student's needs and provide the right intervention;
- (k) Involve parents/guardians and the society at large in the student's learning process; and
- (1) Integrate cross-cutting issues and ICT in the teaching and learning process.

### 6.2 The student

The student is expected to:

(a) Develop the intended competences by actively engaging in various learning activities inside and outside the classroom; and

(b) Participate in the search for knowledge from various sources including textbooks, reference books and other publications in online libraries.

#### 6.3 The parent

The parent/guardian is expected to:

- (a) Monitor their child's academic progress in school;
- (b) Where possible, provide child with the needed academic support;
- (c) Provide the child with a safe and friendly home environment which is conducive for learning;
- (d) Keep track of the child's progress in behaviour;
- (e) Provide the child with any necessary materials required in the learning process; and
- (f) Instil in the child a sense of commitment and positive value towards education and work.

#### 7.0 Teaching and Learning Resources

The process of teaching and learning of the trade, requires different resources. In that regard, both the teacher and students should work together to collect or improvise alternative resources available in the school and home environment when needed. The teacher and student are expected to constantly seek for information from various sources to effectively facilitate the teaching and learning. The list of approved textbooks and reference books shall be provided by the TIE.

#### 8.0 Assessment

Assessment is important in teaching and learning of Textile Design and Small-Scale Printing trade. It is divided into formative and summative assessments. Formative assessment informs both the teacher and students on the progress of teaching and learning, and in making decisions on improving the teaching and learning process. Teachers are, therefore, expected to apply a wide range of formative assessment methods which include but not limited to discussions, presentations, oral questions, brainstorming, experiments, observations, practical and projects.

Summative assessment, on the other hand, will focus on determining student's achievement of learning. Teachers are expected to use a variety of summative assessments including mid-term tests, terminal, mock examinations and projects. The scores obtained from these assessments will be used as Continuous Assessment (CA). Therefore, the continuous assessments shall contribute 30% and the National Form IV Examination shall be 70% of the student's final achievement, as indicated in Table 2.

Assessment measures	Marks (%)
Standard VI National Assessment	7.5
Form II National Assessment	7.5
Form III Anual Examination	05
Form III Project	05
Form IV Mock Examination	05
Form IV National Examination	70
Total	100

**Table 2:** Contribution of Continuous Assessment and National Examination in the final score

### 9.0 Number of Periods

The Textile Design and Small-Scale Printing Syllabus for Vocational Ordinary Secondary Education Form I-IV provides estimates of the time that will be spent in teaching and learning in consideration of the complexity of the specific competences and the learning activities. Twenty-nine periods of 40 minutes each, have been allocated for this trade per week.

### **10.0 Teaching and Learning Contents**

The contents of this Syllabus are presented in matrix form with six columns which include main competence, specific competence, learning activities, assessment criteria, suggested resources, and number periods as presented in Table 3-6.

# Form I

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	No. of periods												
1.0 Master textile design and small-	1.1 Master the concepts, principles, elements	(a) Explain the trade of textile design <i>(meaning, types, functions)</i>	The trade of textile design ( <i>meaning</i> , <i>types and functions</i> ) was well explained	Text books, refence books, online resources like journals, pamphlets and other web- based materials from reliable sources	203												
scale printing	and techniques of textile design and small-scale	(b) Master basic principles, elements and techniques of textile design	Basic principles, elements and techniques of textile design were mastered														
	printing	printing	printing	(c) (d)	printing       (c) Master basic       Basic principles, elements and techniques of small-scale printing         (d) Master portfolio making       Portfolio making was mastered												
																	· · / ·
			(e) Observe ethical, legal and safety issues related to textile design	Ethical, legal and safety issues related to textile design were observed													

 Table 3: Detailed Contents for Form I

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	No. of periods
	1.2 Create textile designs	(a) Create motifs (geometric, floral, traditional and abstract)	Motifs (geometric, floral, traditional and abstract) were created	Pencils, paper, erasers, computers, appropriate software (like Adobe Illustrator, Adobe Photoshop, GIMP, Inkscape, and Krista), compass, paints, painting brush and printers	406
		(b) Create patterns based on selected motifs	Patterns based on selected motifs were created		
		(c) Create pattern repeat layouts ( <i>Half Drop, Full</i> <i>Drop, Mirror and</i> <i>Continuous</i> )	Pattern repeat layouts (Half Drop, Full Drop, Mirror and Continuous) were created		
		(d) Create motifs, patterns and pattern repeat layouts using CAD	Motifs, patterns and pattern repeat layouts were created using CAD		

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	No. of periods
	1.3 Print and dye fabrics	Print the created motifs, patterns and pattern repeat layouts on cloth	The created motifs, patterns and pattern repeat layouts were printed on cloth	Hard sponge <i>(for creating printing motifs and patterns)</i> , soft timber boards, measuring tapes, metal containers <i>(for boiling water)</i> adhesives, scraper, 1/10 <sup>th</sup> mesh nylon or silk, screen printing frame, mash, squeegee, printing ink, parcel tape, ink remover, spatulas, towels, screen mounting materials, pair of scissors, water boiling equipment, plastic buckets, plastic sheet materials for table covering <i>(to protect colour staining)</i> tables, large plastic spoons, protective plastic boots, protective over roll or aprons <i>(polyester material)</i> , masks, gloves <i>(shoulder length)</i> , fabrics <i>(mercerised white cotton materials)</i> , motifs, patterns, printing ink <i>(colours and neutrals)</i>	406

# Form II

 Table 4: Detailed Contents for Form II

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	No. of periods
1.0 Master textile design and small- scale printing	1.2 Create textile designs	(a) Create simple design layouts (e.g. table cover, curtain, pillowcase and bedsheet)	Simple design layouts (e.g., table cover, curtain, pillowcase and bedsheet) were created	Pencils, paper, erasers, computers, appropriate software (like Adobe Illustrator, Adobe Photoshop, Gimp, Inkscape, and Krista) compass, paints, painting brush and printers	348
		(b) Create batik designs	Batik designs were created	Pencils, paper and erasers	
		(c) Create tie and dye designs	Tie and dye designs were created		
	1.3 Print and dye fabrics	(a) Print fabrics (table cover, curtain, pillowcase and bedsheet)	Fabrics (table cover; curtain, pillowcase and bedsheet) were printed	Hard sponge <i>(for creating printing motifs and patterns),</i> soft timber boards, measuring tapes, metal containers <i>(for boiling water and washing dyes),</i> adhesives, scrapers, 1/10 <sup>th</sup> mesh nylon or silk, screen printing frame, mash, squeegee, printing ink <i>(colours and neutrals),</i> parcel tape, ink remover, spatulas, towels, screen mounting materials, pair of scissors, water boiling equipment, plastic buckets, plastic sheet materials for table covering <i>(to protect colour staining),</i> tables, large plastic spoons, protective	609

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	No. of periods
				plastic boots, protective over roll or aprons (polyester material), masks, gloves (shoulder length), fabrics (mercerised white cotton materials) motifs, and patterns	
		(b) Print batiks	Batiks were printed	Measuring tapes, metal containers (for boiling water and washing printed fabrics), scraper, 1/10 <sup>th</sup> mesh nylon or silk, mash, parcel tape, dye remover, spatulas, towels, pair of scissors, strong threads like raffia or that used by shoe makers, water boiling equipment, plastic buckets, plastic sheet materials for table covering (to protect colour staining), used newspapers, pieces of stones, tables, large hospital syringes (for applying molten wax), seeds, large plastic spoons, protective plastic boots, protective over roll or aprons (polyester material), masks, gloves (shoulder length), wax, fixative and pore opening chemicals (caustic soda and sodium hydrosulphite), fabrics (mercerised white cotton materials), motifs, patterns, dyes (colours and neutrals)	

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	No. of periods
		(c) Make tie and dye fabrics	Tie and dye fabrics were made		
	1.4 Secure and promote textile designs and	(a) Create a portfolio for textile designs works	A portfolio for textile design works was created	Portfolio, computer-based backups, online backups	58
	products	(b) Use online platforms for marketing and promoting textile design works	Online platforms for marketing and promoting textile design works were used	Computer with relevant software and internet connections	

# Form III

 Table 5: Detailed Contents for Form III

Main competence		pecific petences	Lea	rning activities	Assessment criteria	Suggested resources	No. of periods
1.0 Master textile design	1.2	2 Create textile designs	(a)	Create design layout for khanga	Design layout for khanga was created	Pencils, paper, erasers, computers, appropriate software (like Adobe Illustrator, Adobe Photoshop, Gimp, Inkscape, and Krista) and	290
and small- scale printing			(b)	Create design layout for curtains	Design layout for curtains was created	printers	
printing	1.3	Print and dye	(a)	Print khanga	Khanga was printed	Hard sponge <i>(for creating printing motifs and patterns)</i> , hardboards, timber boards,	725
		fabrics	(b)	Print curtains	Curtains were printed	measuring tapes, metal containers (for boiling water and washing dyes), adhesives, scraper, 1/10 <sup>th</sup> mesh nylon or silk, screen printing frame, mash, squeegee, parcel tape, ink remover, spatulas, towels, screen mounting materials, pair of scissors, water boiling equipment, plastic buckets, plastic sheet materials for table covering (to protect colour staining), tables, large plastic spoons, protective plastic boots, protective over roll or aprons (polyester material), masks, gloves (shoulder length), fixative and pore opening chemicals (caustic soda and sodium hydrosulphite), fabrics (mercerised white cotton materials) motifs, patterns, printing inks (colours and neutrals)	

# Form IV

 Table 6: Detailed Contents for Form IV

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	Number of periods
1.0 Master textile design and small- scale	1.2 Create textile designs	<ul> <li>(a) Create design layout for kitenge</li> <li>(b) Create</li> </ul>	Design layouts for kitenge was created Design layout for	Pencils, paper, erasers, computers, appropriate software (like Adobe Illustrator, Adobe Photoshop, Gimp, Inkscape, and Krista) and printers	290
printing		design layout for general print patterns	designgeneral print patternslayout forwere createdgeneralprint		
	1.3 Print and dye fabrics	(a) Print kitenge	Kitenge was printed	Hard sponge <i>(for creating printing motifs and patterns)</i> , hardboards, timber boards, measuring tapes, metal containers <i>(for boiling water and washing dyes)</i> , adhesives, scraper, 1/10 <sup>th</sup> mesh nylon or silk, screen printing frame, mash, squeegee, parcel tape, ink remover, spatulas, towels, screen mounting materials, pair of scissors, water boiling equipment, plastic buckets, plastic sheet materials for table covering <i>(to protect colour staining)</i> , tables, large plastic	667

Main competence	Specific competences	Learning activities	Assessment criteria	Suggested resources	Number of periods
		(b) Print general print designs	General print designs were printed	spoons, protective plastic boots, protective over roll or aprons (polyester material), masks, gloves (shoulder length), fixative and pore opening chemicals (caustic soda and sodium hydrosulphite), fabrics (mercerised white cotton materials) motifs, patterns, printing inks (colours and neutrals)	
	1.4 Secure and promote textile designs and products	Archive textile designs	Textile designs were archived	Portfolio, computer-based backups, online backups	58

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