

CREATIVE ARTS AND FASHION

Fashion Technology



WorldSkill Occupational Standards

WorldSkills Occupational Standards (WSOS)

The name of the occupation is

Fashion Technology

Description of the associated work role(s) or occupation(s)

The Fashion Technology practitioner creates garments. The technical skills involved include design, pattern construction, cutting, and garment manufacture and finishing.

The practitioner may work in one of several sectors but often they are self-employed and work on commissioned projects or in the retail manufacturing sector or in sampling garments for production. As such they need to have business acumen and strong interpersonal skills when dealing with clients. Excellent customer care and selling skills are important. As some work is often commissioned for important events, the practitioner must understand the needs of the client and be able to offer appropriate expert advice whilst interpreting the vision for the finished project. Customer briefs must be clearly understood and followed accurately.

Fabrics are often expensive, delicate, and easily damaged if handled incorrectly. Given this, the practitioner must be respectful of the raw materials with which they work and apply extensive knowledge of effective sourcing, purchasing, handling, use, and storage of all materials. Sustainability, ethics and budgets are all serious considerations when sourcing materials and selecting sub-contractors.

The design of a garment requires innovation, creativity, artistic talent, and design skills which incorporate aesthetics as well as function and other design practicalities. The practitioner must apply the rules and theory of composition including design elements and principles as well as excellent construction technique. They are often creative and artistic, with a good eye for design and the ability to create pleasing and functional garments, suitable for their purpose. In addition, a thorough knowledge and understanding of specialist equipment and its use is essential. Another requirement is a high level of technical knowledge in patternmaking and construction techniques. Different fabrics will have in various ways regarding design, as well as react in various ways to the manufacturing process and these characteristics must be considered throughout the design, preparation, and production process.

There is a wide range of practice in the fashion sector. Some practitioners produce small ranges for retail outlets or high-class fashion houses or prepare bespoke garments ordered by individual clients. At the other end of the professional spectrum, the practitioner may work in an industrial setting, producing prototypes for mass production. Practice also varies across the world. The fashion industry is truly global: for example, a garment may be designed and prototyped in one country and sub-contracted for manufacture in another.

Wherever employed, it is essential that the practitioner is aware of current and emerging fashions and trends in the fashion industry. Equally important is an awareness of new developments in fabrics and textiles as well as machinery and equipment. Significant damage can be done to a business and its reputation if fashion trends are misread.

General notes on the WSOS

The WSOS specifies the knowledge, understanding, and specific skills that underpin international best practice in technical and vocational performance. It should reflect a shared global understanding of what the associated work role(s) or occupation(s) represent for industry and business (www.worldskills.org/WSOS).

The skill competition is intended to reflect international best practice as described by the WSOS, and to the extent that it is able to. The Standard is therefore a guide to the required training and preparation for the skill competition.

In the skill competition the assessment of knowledge and understanding will take place through the assessment of performance. There will only be separate tests of knowledge and understanding where there is an overwhelming reason for these.

The Standard is divided into distinct sections with headings and reference numbers added.

Each section is assigned a percentage of the total marks to indicate its relative importance within the Standards. This is often referred to as the “weighting”. The sum of all the percentage marks is 100. The weightings determine the distribution of marks within the Marking Scheme.

Through the Test Project, the Marking Scheme will assess only those skills that are set out in the Standards Specification. They will reflect the Standards as comprehensively as possible within the constraints of the skill competition.

The Marking Scheme will follow the allocation of marks within the Standards to the extent practically possible. A variation of up to five percent is allowed, provided that this does not distort the weightings assigned by the Standards.

WorldSkills Occupational Standards

Section	Relative importance (%)
1 Work organization and management	6

The individual needs to know and understand:

- Materials/fabrics, their characteristics, properties, and uses
- The fashion industry processes across the world
- Processes for mass produced, small collection, bespoke, and couture fashion
- Industry jargon and terminology
- That specialist areas and sectors exist within the industry including knitwear, menswear, children, and infants' clothing
- The need for marketing and good business practice
- The importance of continuous professional development
- Health and safety regulations and best practice
- The importance of maintaining a clean and organized workplace
- The importance of effective work-planning, organization, and deadlines
- The importance of accuracy and care when preparing fabrics for production
- The range, uses and care of specialist tools and equipment used in the fashion industry
- Issues regarding ethics and sustainability regarding the purchase, production, and sale of fashion items
- How to assess for quality assurance at all stages of production

The individual shall be able to:

- Proactively develop own knowledge and skills
- Demonstrate an awareness of current trends and fashions in clothing design, accessories, colours, fabrics, etc.
- Take account of the properties of different fabrics including the limitations of certain fabrics/fibres
- Fully comply with and promote health and safety practices in the workplace to maintain a safe and healthy working environment
- Use all equipment safely and according to manufacturers' instructions
- Use and care for all specialist tools and equipment used in the fashion industry
- Select the correct tool or piece of equipment for each task and design
- Plan and prioritize work to maximize efficiency in the workplace and to meet deadlines
- Work cleanly and safely in all work areas so as to protect materials and finished products throughout
- Keep all work areas clean to facilitate efficiency and protect materials and tools
- Source support for business development
- Purchase materials and fabrics cost effectively with due consideration of sustainability and ethics as well as budgets

Section	Relative importance (%)
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- Amend any areas of the process or product that do not meet quality control standards

2	Communications and interpersonal skills	5
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The individual needs to know and understand:

- The importance of tact, discretion, diplomacy, and confidentiality when meeting with clients
- How to communicate effectively with clients to understand requirements, including design briefs
- How to communicate effectively with other industry professionals including design team members, ordering materials, sub-contracting work or dealing with suppliers
- How to appropriately handle a client in a measuring or fitting situation
- How to communicate effectively including presentation and sales skills

The individual shall be able to:

- Communicate effectively with both internal and external clients and show a good understanding of technical and industry specific terms
- Communicate clearly with clients to understand their specific needs and design requirements
- Act with confidentiality, discretion, and tact when working with clients
- Measure or fit a client for garments with care and tact working with them to make sure client needs and expectations are met
- Provide expert advice and guidance to clients to enable them to make informed decisions about purchases or production requirements
- Seek expert advice and guidance from other industry professionals to enable informed decisions about purchases or production requirements
- Provide expert and tactful guidance on styles, colours, and fabrics that will suit the need of the client and be appropriate for specific designs
- Provide appropriate advice and guidance to a client on the after care of the garment
- Present ideas, designs, vision, and production solutions to both internal and external clients

3	Problem solving, innovation, and creativity	8
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The individual needs to know and understand:

- The importance of both individuality and conformity to all areas of the fashion industry
- Basic machine care, fault finding, and resolution
- Creativity and its relevance and importance to the fashion industry
- All technical aspects of the production process
- Fabric properties and characteristics
- The purposes, properties, and characteristics of specialty fabrics

Section	Relative importance (%)
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- The limitations of the design and production process, and how to anticipate and address technical problems which may arise

The individual shall be able to:

- Demonstrate innovation and creativity in design
- Think creatively to devise innovative solutions
- Use creative solutions to resolve design and/or production challenges
- Alter garments to provide a better or custom fit, to update or to make garments more appropriate
- Anticipate design or construction issues relating to fabric properties including the properties of speciality fabrics and seek to use appropriate cutting and construction techniques (including pressing)
- Resolve production issues in cutting and construction relating to availability of materials (or quantities), design, and/or construction techniques and cost
- Critically judge the quality of the garment and finish and proactively seek resolutions to any imperfections both during and after the production process
- Resolve basic machine issues such as broken needles

4 Fashion design	13
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The individual needs to know and understand:

- The design elements and principles
- The range of fabrics and materials available to the fashion designer, their characteristics, uses and care
- Developments in new and speciality fabrics, and their implications for fashion and clothing
- Current fashions, trends and themes relating to materials and fabrics, colour and style
- The impact of culture and tradition in fashion design
- The range and type of materials that can be used as part of a fashion garment design (both outside and inside the garment)
- The co-ordination of colours, styles, materials/fabrics, accessories and themes
- The range of styles and cuts that are common in garment making, the associated terminology and how they are represented in sketches or on prototype designs
- The impact of body shape and size on the fit and appearance of a fashion garment
- Global influences on fashion design and how traditions and national characteristics impact design
- The bearing of the production process, and its costs, on opportunities and constraints for design
- How to communicate design concepts and ideas to potential clients or industry professionals
- The technical elements of garment construction and how they impact production in reference to materials, function, wearability, and costings

Section	Relative importance (%)
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The individual shall be able to:

- Research fashion trends and apply these appropriately to designs
- Direct the design to the target market or individual when designing fashion items
- Illustrate garment designs showing technical details
- Create theme/trend boards and illustrations to communicate ideas, concepts and visions
- Identify different types of fabric and select suitable fabrics for particular uses
- Take account of the properties of selected speciality fabrics within the design, development and production process
- Apply knowledge of basic cuts and styles to inform designs but not to restrict creativity and innovation
- Select appropriate fabrics to different fashion designs
- Select and use different notions such as zips, buttons, shoulder pads as well as trims like lace, beads, and ribbons
- Apply different embellishments and accessories to the design
- Co-ordinate colours, styles, materials/fabrics, and accessories to produce high quality design
- Provide professional and tactful guidance on styles, colours, and fabrics that will suit the need of the client
- Use artistic ability, creativity, and innovation to design a full variety of garments for all manner of target markets
- Create designs following a theme or design brief
- Alter and adapt designs to meet clients' needs and to make the design relevant to the brief
- Modify ready-made garments to create new designs

5 Technical drawing	8
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The individual needs to know and understand:

- How to both interpret and create specialist technical drawings
- Specialist industry-related terminology and symbols
- The use of IT and specialist software to produce images and designs

Section	Relative importance (%)
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The individual shall be able to:

- Communicate effectively with clients
- Understand specific requirements when working with internal and external clients
- Provide professional advice and guidance to internal and external clients to enable them to make informed decisions about fabrics, design, production and costings
- Create specialist technical drawings using industry recognized terminology and symbols that effectively convey necessary design details and vision
- Present ideas, designs, vision, and production solutions to client
- Read and interpret both technical drawings and fashion drawings or photos
- Prepare accurate line/flat drawings by hand, showing technical design elements
- Use computers and specialist software to create CAD 2D and 3D images
- Clearly label drawings and images
- Prepare clear, logical, sequential, and accurate written and diagrammatical instructions that convey all necessary information in readiness for production assembly and the manufacturing process (e.g. specification sheets)

6 Pattern construction and draping	22
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The individual needs to know and understand:

- The construction of garments using 2D flat patterns or 3D draping
- The process to create 2D patterns for various garments using blocks or slopers or drafting from measurements
- How to use specialist patternmaking equipment
- The use of IT specialist software to produce patterns
- Basic grading of patterns to other sizes
- The use of dress forms in constructing garments or testing patterns
- The requirements of different designs and how to use the most appropriate cut or patternmaking principle
- How various fabrics react to different styles or production techniques
- How to mark fabrics and the importance of accuracy
- How various styles function with regard to fit and easing
- How to utilize patternmaking

Section	Relative importance (%)
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The individual shall be able to:

- Create/develop or alter patterns for various types of garments, such as tailored jackets, dresses, skirts, or trousers
- Drape on dress forms for various types of garments, such as tops, dresses, skirts, or trousers
- Select the best method of construction appropriate to different fabrics, designs and markets
- Prepare calico/muslin or toile garments or parts of garments to prototype/test patterns
- Transfer draped 3D patterns to paper or pattern board
- Measure and mark accurately
- Choose appropriate linings and fusings for fabric and design requirements and develop patterns accordingly
- Fit garments to specified sizes
- Prepare patterns for cutting with appropriate seam allowances and grainlines, darts etc.
- Label patterns with clear information regarding size, style, cutting, etc

7	Cutting, sewing, and finishing techniques	38
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The individual needs to know and understand:

- The importance of accuracy when cutting fabrics in order to minimize wastage and to optimize the finished garment
- Pattern preparation and correct layout and marking of patterns on fabric
- The use of cutting tools both manual and electric
- The machinery and tools used for garment production
- The maintenance and use of industrial machines
- Garment construction processes/techniques
- The industry terms for different techniques and finishes
- Different types of stitching and finishing and their appropriate applications
- Various notions/trims and their uses such as threads, zips, piping, fastenings, etc.
- The properties of different fabrics and how to handle them including when cutting, sewing, and pressing

The individual shall be able to:

- Accurately measure fabrics according to the pattern
- Correctly prepare and mark a layout to optimize fabric utilization and follow pattern instructions
- Cut fabrics accurately using the most appropriate tool or equipment
- Use various types of industrial equipment used in the fashion industry, such as sewing machines, overlocking machines, irons, and a fusing press
- Select the appropriate tool or equipment for the task
- Use all machinery safely and in accordance with the manufacturer's instructions
- Conduct trials to ensure that the machine settings are appropriate for fabrics being used and the application

Section	Relative importance (%)
<ul style="list-style-type: none"> • Apply fusing appropriately and effectively to different parts of the design • Construct and apply facings, interfacing, interlining, and lining appropriately • Handle and care for fabrics to ensure that they are not damaged and remain in good condition • Sew accurately by machine various types of garments or parts of garments • Use a variety of different stitches and finishes on garments or parts of garments according to the specification sheet, technical drawing, or pattern • Finish fashion garments professionally • Finish parts of garments with hand sewing • Proficiently execute specialist sewing skills and techniques • Press garments effectively both during and at the end of production • Present finished garments professionally • Resolve any issues of quality control to ensure a quality product 	
Total	100

References for industry consultation

WorldSkills is committed to ensuring that the WorldSkills Occupational Standards fully reflect the dynamism of internationally recognized best practice in industry and business. To do this WorldSkills approaches a number of organizations across the world that can offer feedback on the draft Description of the Associated Role and WorldSkills Occupational Standards on a two-yearly cycle.

In parallel to this, WSI consults three international occupational classifications and databases:

- ISCO-08: (<http://www.ilo.org/public/english/bureau/stat/isco/isco08/>)
- ESCO: (<https://ec.europa.eu/esco/portal/home>)
- O*NET OnLine (www.onetonline.org/)

This WSOS appears to relate most closely to *Fashion Designers*:

<https://www.onetonline.org/link/summary/27-1022.00>

and *Fashion Designer*:

<http://data.europa.eu/esco/occupation/77bfd6e7-5598-4818-84cb-31e2651eb046>

The following table indicates which organizations were approached and provided valuable feedback for the Description of the Associated Role and WorldSkills Occupational Standards in place for WorldSkills Shanghai 2022.

There were no responses to the requests for feedback this cycle.