

# TECHNICAL DESCRIPTION

## FASHION TECHNOLOGY



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WorldSkills International, by a resolution of the Technical Committee and in accordance with the Constitution, the Standing Orders and the Competition Rules, has adopted the following minimum requirements for this skill for the WorldSkills Competition.

The Technical Description consists of the following:

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Effective 11.10.11



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## **1. INTRODUCTION**

### **1.1 Name and description of skill**

1.1.1 The name of the skill is

Fashion Technology

1.1.2 Description of skill

Fashion Technology professionals work closely with clients either in production or custom garments for individual clients. They create garments, using their knowledge of materials and accessories, fashion and colour trends and work within the parameters and requirements of the client / company they are producing the work for.

Fashion Technology professionals working in small firms usually perform most of the technical pattern making, cutting and sewing task in addition to designing clothing

They are technically skilled garment producers who are highly efficient at handling different materials and are skilled in using both industrial machine and hand sewing techniques.

Requirements include: knowledge of fashion, creativity, imagination together with professional level technical skills.

### **1.2 Scope of application**

1.2.1 Every Expert and Competitor must know this Technical Description.

1.2.2 In the event of any conflict within the different languages of the Technical Descriptions, the English version takes precedence.

### **1.3 Associated documents**

1.3.1 As this Technical Description contains only skill-specific information it must be used in association with the following:

- WSI - Competition Rules
- WSI - Online resources as indicated in this document
- Host Country - Health and Safety regulations

## **2. COMPETENCY AND SCOPE OF WORK**

The Competition is a demonstration and assessment of the competencies associated with this skill. The Test Project consists of practical work only.

### **2.1 Competency specification**

#### General

Competitors shall have the knowledge and understanding to:

- Create and understand technical drawings
- Plan work effectively to achieve task completion within a given time
- Select appropriate equipment / tools to create design style
- Maintain a safe work environment

### Fashion designing

Knowledge and understanding:

- Understanding of the design elements of ladies' outfits and accessories

Competitors shall be able to:

- Research fashion trends and themes analysis
- Creating theme board and trend board
- Set designs for different target markets
- Create technical drawings
- Coordinate fabric and colours
- Present ideas
- Identify different types of fabric (e.g. silk, knitted jersey, Gore-Tex, denim, wool, etc.)
- Apply different types of fabric on different designs
- Identify different types of accessories (e.g. buttons, zippers, lace, ribbon, etc)
- Apply different accessories on different designs
- Design various types of ladies' fashion garments (e.g. tailored jackets, evening dress, skirts, pants, etc)
- Plan working procedures effectively to achieve task completion within the given time

### Pattern construction/draping

Knowledge and understanding:

- Understanding of the construction of ladies' outfits by 2D paper pattern or 3D draping

Competitors shall be able to:

- Construct and alter basic patterns for various types of ladies' fashion garments (e.g. tailored jackets, evening dress, skirts, pants, etc) or
- Drape on dummies for various types of ladies' fashion garments (e.g. tailored jackets, evening dress, skirts, pants, etc)
- Select the best method of construction appropriate to different fabric and design
- Mark accurately
- Measure accurately
- Cut different fabric and material accurately
- Fit ladies' garment to specified sizes
- Plan working procedures effectively to achieve task completion within the given time

### Sewing and finishing techniques

Knowledge and understanding:

Knowledge of high quality sewing and finishing of ladies' outfits

Competitors shall be able to:

- Sew and finish various types of ladies' fashion garments (e.g. tailored jackets, evening dress, skirts, pants, etc)
- Use various industrial machines effectively and safely (e.g. sewing machine, interlocking machine, iron, fusing press, etc)
- Select appropriate equipment and tools to create the designed style
- Finish parts of garments with hand sewing (e.g. hem, buttonholes, embroidery, etc.)
- Apply fusing (interlining) appropriately and effectively to different parts of the designed style
- Construct linings and facings appropriate according to the style of the designed garments
- Press garments effectively
- Plan working procedures effectively to achieve task completion within the given time

## 2.2 Theoretical knowledge

2.2.1 Theoretical knowledge is required but not tested explicitly.

2.2.2 Knowledge of rules and regulations is not examined.

## 2.3 Practical work

The practical work to be carried out by the Competitor will include:

- Preparation and creation technical drawing as specified in the Test Project
- Design and construct garments and/or elements which are set to a theme specified in the Test Project
- Construction of mandatory garments and/or elements that are specified in the Test Project
- Design, creation paper pattern or drape of the garment as specified in the Test Project
- Measurement, layout and cutting fabric as specified in the Test Project
- Use various industrial machines efficiently to construct garments specified in the Test Project
- Finish a small number of garments with hand sewing
- Presentation the completed Test Project neatly.

## 3. THE TEST PROJECT

### 3.1 Format / structure of the Test Project

The format of the Test Project is a single Test Project with separately assessed modules.

The Test Project must contain at least 3 modules and be able to be assessed throughout the Competition.

### 3.2 Test Project design requirements

- The Host Member must provide measurements of the dummy (Bust: Waist: Hip: Back Length). This must be provided by the Workshop Supervisor 1 month after the selection of the test project has taken place.
- All materials and fabrics must be suitable for the Test Project and commercially available. The Competition Organiser will provide contacts of supplier or agent for fabric.
- The Test Project must include fabrics of different weight.
- The Test Project must be able to match with the concept of providing a 'mystery box' to all Competitors. The 'mystery box' will contain different types of trimmings and accessories to test the creativity design skill.
- The Host Member has to send swatches of the chosen fabrics and trims (a swatch 30cm x 30cm should be provided of each fabric and at least 50cm length in full width if the fabric has large pattern) at least 3 months prior to the Competition.
- The Test Project must include a mandatory garment or part of garment for objective marking.
- The Test Project must include a non mandatory garment or part of garment (creativity and design) for subjective marking.
- The Test Project must include a blind marking section such as mandatory garment.
- All materials (such as fabric, CD, digital and paper pattern) relating to the chosen Test Project to be sent via registered mail by the Competition Organiser.

### 3.3 Test Project development

The Test Project MUST be submitted using the templates provided by WorldSkills International (<http://www.worldskills.org/competitionpreparation>). Use the Word template for text documents and DWG template for drawings.

3.3.1 Who develops the Test Project / modules  
The Test Project / modules are developed by:

All Experts and must be validated as defined in 3.5.

3.3.2 How and where is the Test Project / modules developed

Independently by the Experts.

3.3.3 When is the Test Project developed  
The Test Project is developed according to the timeline below.

Time	Activity
16 months prior to the Competition	Test Project proposals are uploaded to the Discussion Forum. Test Project proposals are uploaded to the Discussion Forum for consideration and voting by the Experts.
9 months prior to the Competition	Discussions regarding the proposals finish, and a vote to select the Test Project is conducted.
6 months prior to the Competition	The Test Project is circulated on the WSI website.
At the Competition	30% change is agreed to by the vote of the Experts.

### 3.4 Test Project marking scheme

Each Test Project must be accompanied by a marking scheme proposal based on the assessment criteria defined in Section 5.

3.4.1 The marking scheme proposal is developed by the person(s) developing the Test Project. The detailed and final marking scheme is developed and agreed by all Experts at the Competition.

3.4.2 Marking schemes should be entered into the CIS prior to the Competition.

### 3.5 Test Project validation

Test projects proposals found not to be compliant with 3.2 and 3.6 will have the opportunity during this time make the necessary changes.

It must be demonstrated that the Test Project/modules can be completed within the material, equipment, knowledge and time constraints. This will be demonstrated by a sample of the mandatory elements of the garment or a complete garment. This is provided by the Expert who designed the Test Project.

Each mandatory garment or piece of garment has to be displayed as a sample at the Competition site, for the Competitor and the public to see.

### 3.6 Test Project selection

The Test Project is selected as follows:

By vote on the Discussion Forum 9 months prior to the Competition.

To be eligible for selection each submitted Test Project must be complete and include a digital copy of the Test Project, a digital copy of the entire pattern in DXF format, a detailed marking scale, professional drawings and technical drawings and a sample of the mandatory elements of garment or a complete garment.

### 3.7 Test Project circulation

The Test Project is circulated via WorldSkills International website as follows:

6 months before the current Competition.

### 3.8 Test Project coordination (preparation for Competition)

Coordination of the Test Project will be undertaken by:

Coordination of the Test Project will be undertaken by the Expert whose Test Project has been selected and the Host Member.

### 3.9 Test Project change at the Competition

Due to the TP being circulated to Competitors 6 months prior to the Competition it is necessary to make a 30% change at the Competition. Experts on the Jury Panel may submit ideas for the 30% change. Experts will vote on the changes to be made upon arrival at the Competition.

### 3.10 Material or manufacturer specifications

- All materials (such as fabric, CD, digital and paper pattern) relating to the chosen Test Project to be sent via registered mail by the Competition Organiser at least 3 months prior to the Competition. Swatches must be 30cm x 30cm of the chosen fabrics and at least 50cm length in full width if the fabric has large pattern.
- All materials and fabrics must be suitable for the Test Project and commercially available.
- The Competition Organiser will provide contacts of supplier or agent for fabric at least 3 months prior to the Competition.
- The Competition Organiser is required to send samples at least 3 months prior to the Competition.

## 4. SKILL MANAGEMENT AND COMMUNICATION

### 4.1 Discussion Forum

Prior to the Competition, all discussion, communication, collaboration and decision making regarding the skill must take place on the skill-specific Discussion Forum (<http://www.worldskills.org/forums>). All skill-related decisions and communication are only valid if they take place on the forum. The Chief Expert (or an Expert nominated by the Chief Expert) will be moderator for this forum. Refer to Competition Rules for the timeline of communication and competition development requirements.

### 4.2 Competitor information

All information for registered Competitors is available from the Competitor Centre (<http://www.worldskills.org/competitorcentre>).

This information includes:

- Competition Rules
- Technical Descriptions
- Test Projects
- Other Competition-related information

### 4.3 Test Projects

Circulated Test Projects will be available from [worldskills.org](http://worldskills.org) (<http://www.worldskills.org/testprojects>) and the Competitor Centre (<http://www.worldskills.org/competitorcentre>).

#### 4.4 Day-to-day management

The day-to-day management is defined in the Skill Management Plan that is created by the Skill Management Team led by the Chief Expert. The Skill Management Team comprises the Jury President, Chief Expert and Deputy Chief Expert. The Skill Management Plan is progressively developed in the six months prior to the Competition and finalised at the Competition by agreement of the Experts. The Skill Management Plan can be viewed in the Expert Centre (<http://www.worldskills.org/expertcentre>).

## 5. ASSESSMENT

This section describes how the Experts will assess the Test Project / modules. It also specifies the assessment specifications and procedures and requirements for marking.

### 5.1 Assessment criteria

This section defines the assessment criteria and the number of marks (subjective and objective) awarded. The total number of marks for all assessment criteria must be 100.

Section	Criterion	Marks		
		Subjective (if applicable)	Objective	Total
A	Design	10		10
B	Realisation of Patterns	5	15	20
C	Construction	10	35	45
D	Appearance	15		15
E	Level of Difficulty	10		10
<b>Total =</b>		<b>50</b>	<b>50</b>	<b>100</b>

### 5.2 Subjective marking

Scores are awarded on a scale of 1 to 10

### 5.3 Skill assessment specification

#### Criterion A – Design

Experts will assess the following aspects subjectively:

- Creativity
- Original concept/innovation
- Use of supplied materials
- Use of the elements and principles of design
- Technical drawings
- Fabric and colour co-ordination

#### Criterion B – Realisation of Patterns

Experts will assess the following aspects both subjectively and objectively:

- Accurate measurement
- Layout and cutting
- Draping
- Pattern accuracy
- Pattern information (seam allowances, grainline, cutting instructions, notches etc)



#### Criterion C – Construction

Experts will assess the following aspects both subjectively and objectively:

- Measurements
- Lay-out and cutting
- Seams and matching of junctions
- Execution of construction
- Quality of construction

#### Criterion D – Appearance

Experts will assess the following aspects both subjectively:

- General pressing
- Drape and shape of the garment
- Quality of the sewing and finishing

#### Criterion E – Level of Difficulty

Experts will assess the following aspects both subjectively:

- Concept realisation (pattern)
- Construction techniques

### **5.4 Skill assessment procedures**

Prior the Competition, the Chief Expert will explain the assessment method to all Experts.

The Chief Expert will divide all the Experts into teams for purpose of marking and setting up marking schedules. The teams are to be divided between experienced Experts and new Experts.

All the Experts should assess the same aspects for all the Competitors.  
All Experts assess the same percentages of the marks.

Objective marking will be marked by teams according to criteria set, e.g. measurements, as detailed in paragraph 5.3.

Subjective marking will be marked by teams using flash cards as detailed in paragraph 5.2.

## **6. SKILL-SPECIFIC SAFETY REQUIREMENTS**

Refer to Host Country Health & Safety documentation for Host Country regulations.

The following skill-specific safety requirement must also be adhered to.

- The electrical cord should not be in the way and must be taped to the floor and the table.
- 1000 Lux lighting over all work areas

## **7. MATERIALS & EQUIPMENT**

### **7.1 Infrastructure List**

The Infrastructure List details all equipment, materials and facilities provided by the Host Country.

The Infrastructure List is online (<http://www.worldskills.org/infrastructure/>).

The Infrastructure List specifies the items & quantities requested by the Experts for the next Competition. The Competition Organiser will progressively update the Infrastructure List specifying the actual quantity, type, brand/model of the items. Items supplied by the Competition Organiser are shown in a separate column.

At each Competition, the Experts must review and update the Infrastructure List in preparation for the next Competition. Experts must advise the Technical Director of any increases in space and/or equipment.

At each Competition, the Technical Observer must audit the Infrastructure List that was used at that Competition.

The Infrastructure List does not include items that Competitors and/or Experts are required to bring and items that Competitors are not allowed to bring – they are specified below.

## **7.2 Materials, equipment and tools supplied by Competitors in their toolbox**

- Tailor's chalk
- Pencils
- Tracing wheel
- Tracing paper
- Thimble
- Scissors (paper, fabric, electric scissors or rotary cutter)
- Rulers
- Pins
- Stitch ripper
- Magnetic edge-guide
- Hand sewing needles
- Pressing equipment (hams, bias tape maker etc)
- Weights
- Clock / Timer
- A selection of drawing tools (coloured pencils etc)
- Patternmaking construction tools (calculator, rulers, curves etc)
- Loop turner
- Screwdrivers

This list is a suggestion of tools for Competitors to bring however it is not exclusive.

The toolbox will be checked by the Experts every day.

The use of equipment used to create specialised fabrications according to a Competitor's design must be proposed and discussed on the forum and during the familiarisation period by the Experts.

If a Competitor needs special tools unique to their own country/region then the tools must be made available (brought by the Expert/Competitor) for every Competitor on Familiarisation Day C-2.

## **7.3 Materials, equipment and tools supplied by Experts**

Not applicable

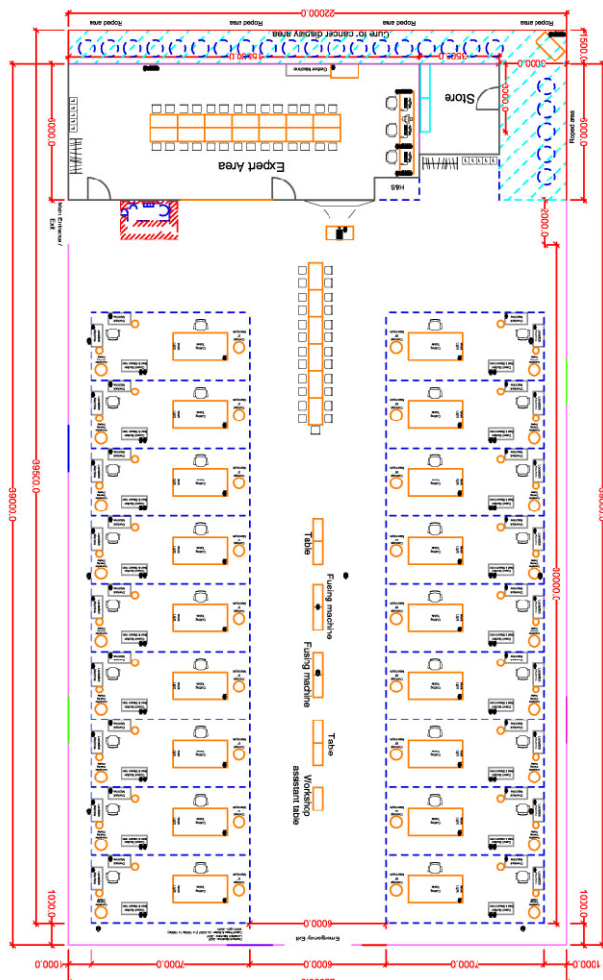
## **7.4 Materials & equipment prohibited in the skill area**

No Competitor is allowed to bring any kind of equipment, fabric, tape, thread, pattern pieces, slopper, books, notes or samples. If any of these are found they will be taken away prior to and during the Competition.  
See note above\*

## **7.5 Proposed workshop and workstation layouts**

Workshop layouts from London are available at:  
[http://www.worldskills.org/index.php?option=com\\_halls&Itemid=540](http://www.worldskills.org/index.php?option=com_halls&Itemid=540)

Workshop layout:



## 8. **MARKETING THE SKILL TO VISITORS AND MEDIA**

### 8.1 **Maximising visitor and media engagement**

To maximise visitor and media engagement the following ideas will be considered:

- Display screens
- Test Project descriptions
- Enhanced understanding of Competitor activity
- Competitor profiles
- Daily reporting of competition status
- Fashion show towards the end of the Competition
- The public votes for the "Visitor's Award"

### 8.2 **Sustainability**

- Recycling
- Use of 'green' materials
- Use of completed Test Projects after Competition