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Module 2

UNIT 4

DEADSTOCK FABRIC BACK TO LIFE: CREATION PROCESS AND IDEA GENERATION IN DESIGN

Duration: 10 hours

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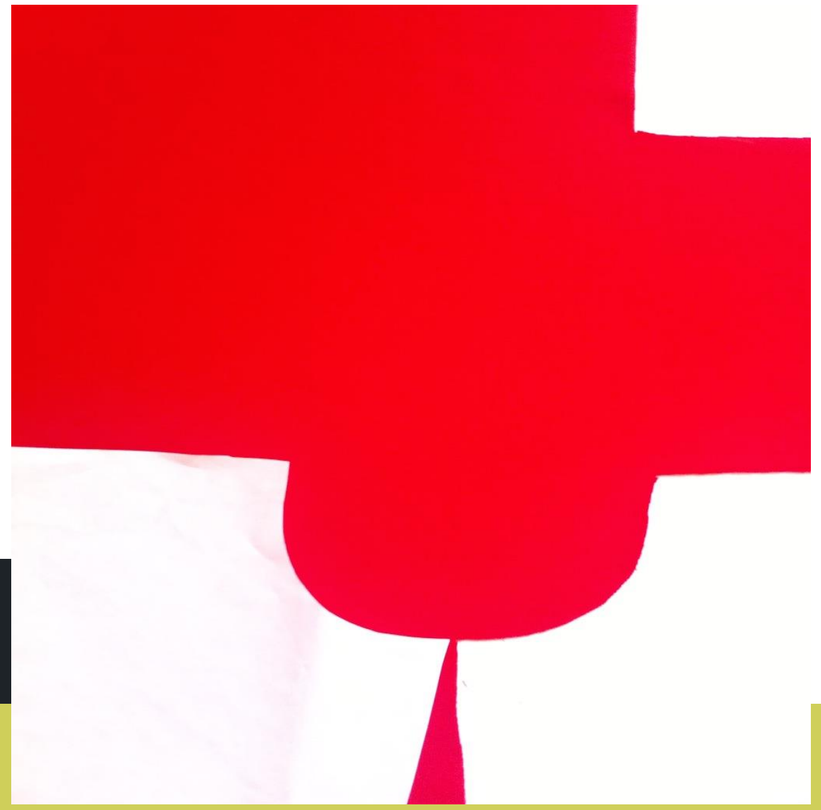
Overview of the Unit

Unit 4 aims to emphasize the significance of sourcing **deadstock fabrics** from the fashion industry as primary materials for apparel design. The unit will offer practical tips on how to handle these materials to create high-quality garments, while also teaching you how to adapt existing patterns to fit these fabrics. This approach encourages more **flexible** and **experimental** pattern design, allowing you to explore creative possibilities. Through techniques like **draping** directly on the mannequin, you will have the opportunity to experiment freely with the fabrics. The unit will also promote **de-contextualization** and **creative exploration**, encouraging the use of a wide variety of fabrics in

Expected Learning Outcomes



By the end of this Unit, you will be able to:

1. **Understanding Deadstock and Fabric Scraps**: you will gain knowledge of deadstock fabrics, recognizing their value as sustainable materials in fashion design.
2. **Handling and Treating Alternative Fabrics**: you will learn practical techniques for working with deadstock fabrics and fabric scraps, including methods to ensure durability in the final product.
3. **Adapting Patterns to Recycled Materials**: you will develop the ability to adapt existing patterns to work with non-traditional fabrics

Estimated Reading Time
19 minutes

Pre-requisite knowledge

This Unit assumes a basic understanding of fabrics, sewing and pattern cutting.

Learning Objective

The Unit aims to show the value of deadstock fabrics and fabric scraps as primary resources in apparel design. **Adapt Patterns for Sustainability**: Adapt pre-existing patterns to fit non-traditional materials while maintaining functionality and fit.

Target Audience

This Unit targets people/learners/entrepreneurs including NEETs, low skilled adults
looking for a job or in reconversion but also looking for a better placement within the
artisanal clothing sector, professionals already working in the sector, students
graduated by secondary schools within fashion or textile design curricula. Among the
target groups, special regard will be given to women with economic fragilities.

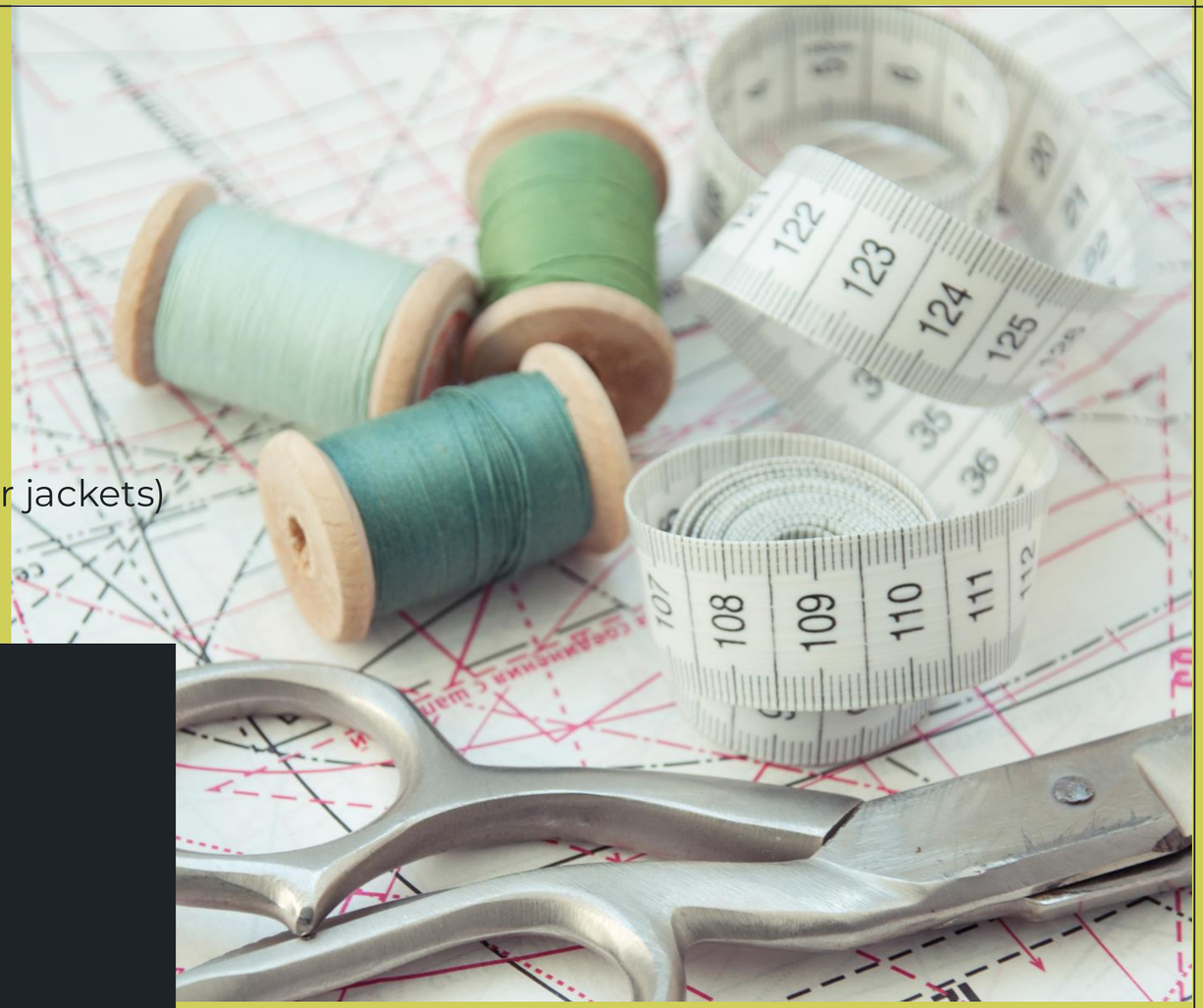
Key concepts

Deadstock fabric, pattern cutting, pattern alterations, alternative fabrics

Necessary equipment

For this Unit's practical part you will need

- Pattern paper
- Tape measure
- Pencil and paper
- Tracing wheel
- Pins
- Paper + fabric scissors
- Iron
- Deadstock fabric (wool or medium weight fabric for jackets)
- Fabric for lining
- Polyester thread (colour matching your fabrics)



01

Teacher's Profile

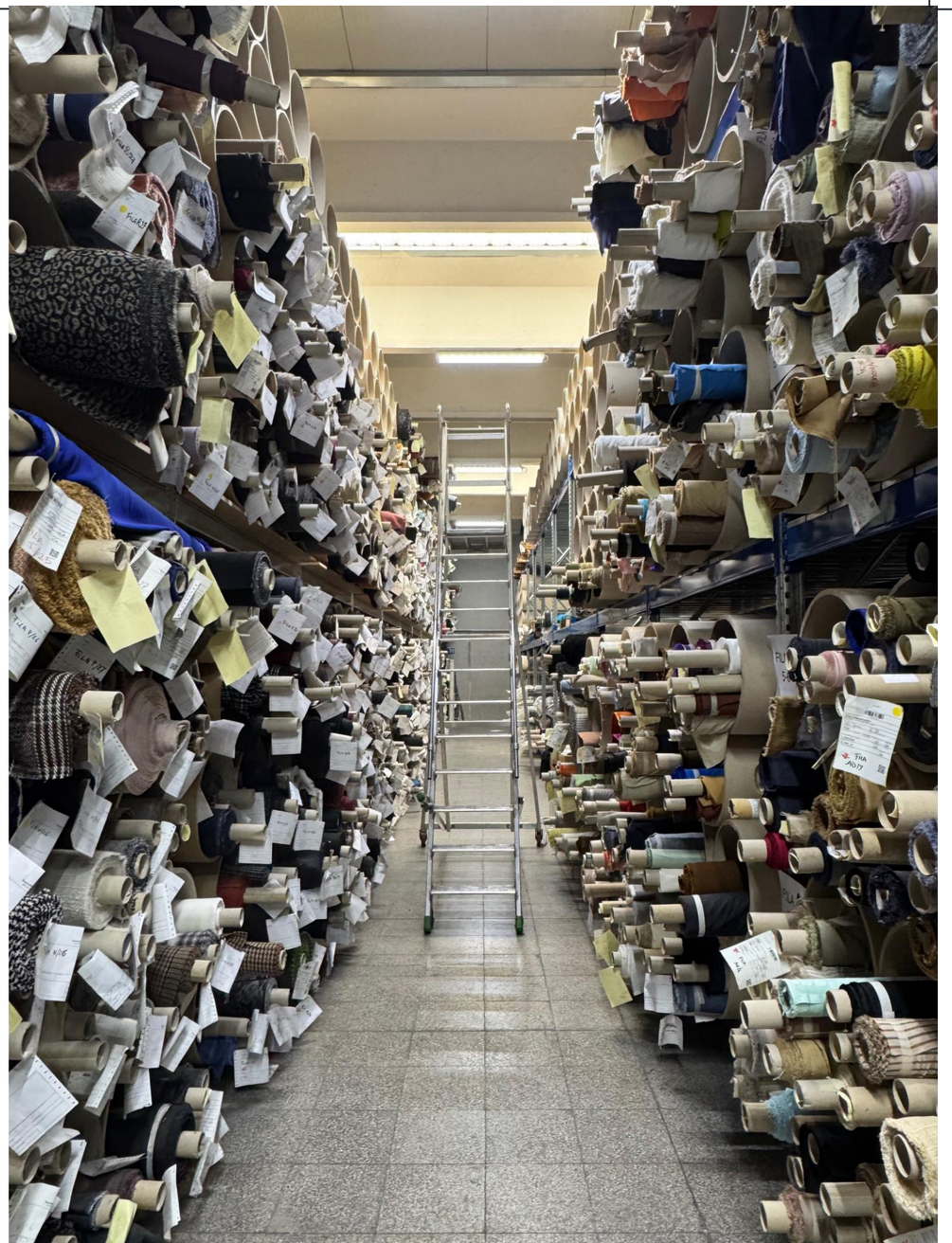
Teachers should know basic of pattern cutting and sewing.

01

Methodology

This Unit introduces a theoretical part which is followed by a practical part.

DEADSTOCK / VOCABULARY



Deadstock fabrics refer to surplus textiles originally produced for other fashion houses or brands that have remained unused, often due to overproduction or design changes. These materials represent a sustainable choice for environmentally conscious designers.

Usually they come form European fabric factories based in Italy, Spain and Portugal.

There are two main types of deadstock fabrics:

-fabric mill production surplus

-deadstock designer fabrics.

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PRODUCTION SURPLUS

Created by the mill but never makes it to the intended customer for many reasons (defects, printing errors that the original customer considers unacceptable but might be perfect for another designer)

DESIGNER FABRIC

Fabrics that have left the mill and reached the customer or fashion brand but were not used to create garments as originally intended.

DEADSTOCK

Utilizing deadstock fabric helps minimize textile waste and pollution. Moreover, it offers a more sustainable fabric sourcing method, as it demands significantly less water and energy for production.

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DEADSTOCK / ORIGIN

The term "deadstock" was first introduced by fashion insiders in the early 2000s, a period marked by growing awareness of textile waste and its environmental impact. In response, many companies started donating their surplus fabric to charities or selling it at discounted rates.

In recent years, deadstock fabrics have gained significant popularity among sustainable fashion brands. Designers increasingly use these materials to craft unique and eco-friendly garments. Consequently, deadstock fabric has become a vital resource in the effort to combat textile waste.

DEADSTOCK / CONS

- Some deadstock fabric can be expensive
- There can be a limited selection of designs and colors
- It may not have been produced with sustainable practices

Deadstock fabric presents challenges with supply chain transparency, making it difficult to trace the origin and production process of the fibers. This lack of clarity raises the possibility that the fabric may not have been produced in an environmentally friendly or socially responsible manner and could involve the use of harmful chemicals.

Although using deadstock helps reduce landfill waste, its processing can be resource-intensive. While it offers a more sustainable alternative, it may also lead to overproduction, as mills anticipate that surplus fabric will still find buyers.

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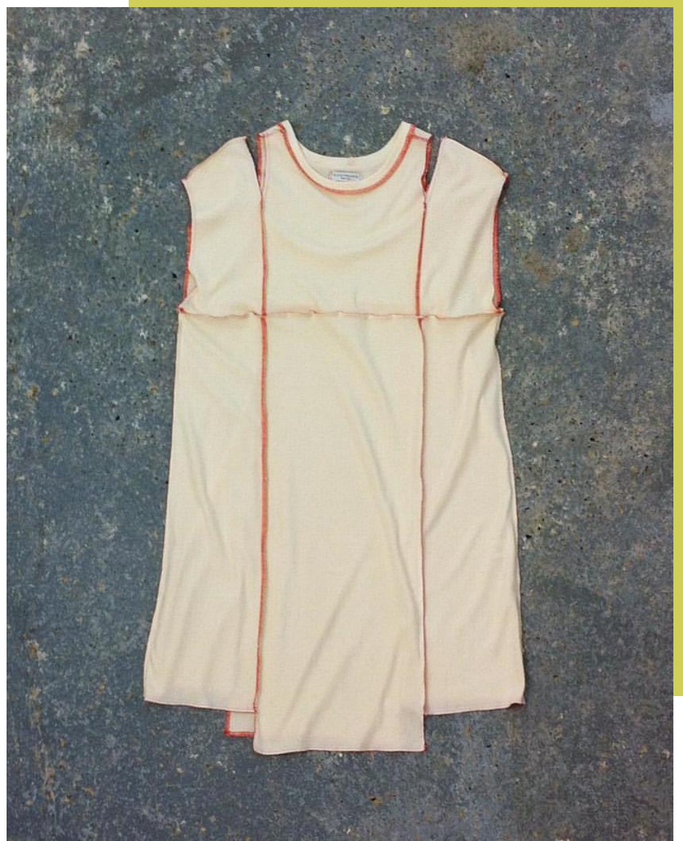
DEADSTOCK / RAW MATERIALS

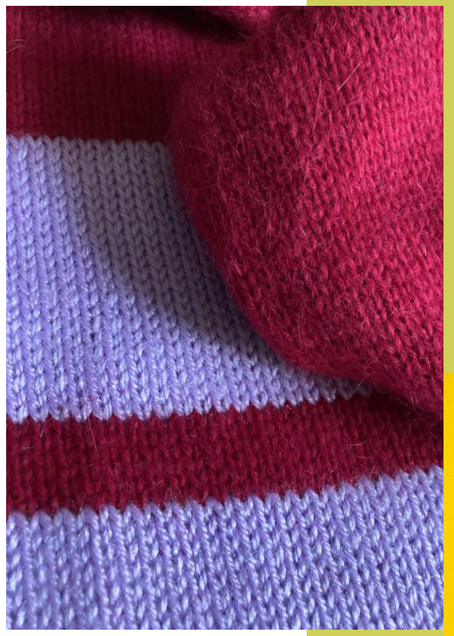
Unfinished fabrics or textiles are commonly known as "greige goods." These are materials that have been woven or knitted but have not yet undergone processes like dyeing, printing, or finishing.



DEADSTOCK / KNIT VS WOVEN

Mainly you can find two types of materials > also see module?

Knitted: stretch properties, comfort, more delicate
Made by looping yarns together in a continuous pattern, creating a flexible and stretchy structure (e.g., T-shirts, leggings).
Within the knitted family there is jersey, which is a knitted fabric usually sold on a roll, same as woven fabric.
Less prone to fraying but can unravel if cut without proper finishing.
Woven: can be also stretch if blended with elastane or cut on the bias.
Created by interlacing two sets of yarns (warp and weft) in a crisscross pattern, making it more structured and stable.
(e.g., jeans, dress shirts)
More durable and resistant to wear but frays at cut edges.
For More info on fabrics See Module 3, Unit 2



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DEADSTOCK / CREATIVE PROCESS

Deadstock fabric It sparks creativity, whether it’s crafting jewel-like garments from brocade, jacquard, or corduroy—pieces meticulously designed, cut, and assembled while navigating the dual challenges of limited material quantities and intricate patterns—or scaling the process for large-scale production by reusing multiple stocks or leveraging substantial quantities of available materials.

DEADSTOCK / CREATIVE PROCESS

Often the design process is reversed. Beginning with the stock itself—considering the available yardage and the material's technical characteristics—rather than starting with a predefined pattern, allows for the creation of the most suitable product.

DEADSTOCK / LUXURY FASHION

Marine Serre is a French luxury brand.
92 per cent of Serre's Autumn 2022 collection "Hard Drive" was made from either regenerated — upcycled, deadstock and recycled fabrics — (70 per cent) or certified sustainable materials such as organic cotton (22 per cent), a proportion that's climbing as the designer continues to invest in in-house processing for deadstock and vintage goods. She's developed her own supply chain in her Paris studio to disassemble garments and ready the upcycled materials for manufacturing.

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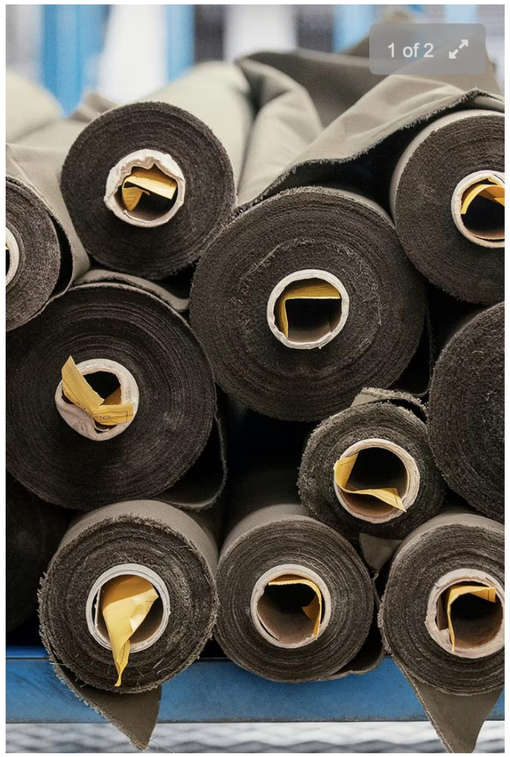
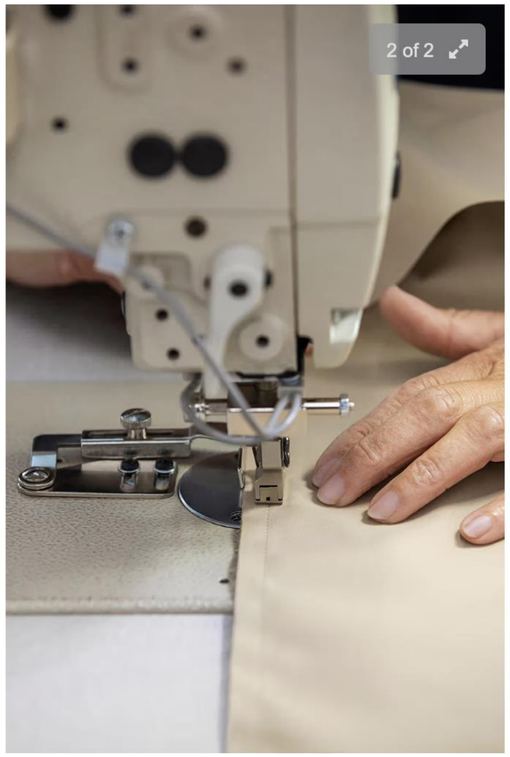
DEADSTOCK / LUXURY FASHION

To enhance sustainability, brands are increasingly donating or selling their deadstock fabrics to smaller brands and students. For instance, Burberry, in collaboration with the British Fashion Council, has launched the *ReBurberry Fabric Initiative*, which donates surplus fabric to fashion students for their coursework. Similarly, LVMH is introducing *Nona Source*, an online marketplace that will sell its high-end deadstock fabrics.





Burberry

DEADSTOCK / CERTIFICATES

When using deadstock fabrics, it's important to evaluate their quality and suitability.
Thoroughly assess the fabric's composition and properties. Is it natural or synthetic? What are its weight and drape?
Answering these questions will help you to evaluate if that's the right fabric for your design.
For example garments that are designed as skin layers should be made of natural fibres while outer layers can be made in artificial fabrics too.
There is no real possibility of traceability, as deadstock material comes from various and often uncertain sources. However, some stock suppliers can provide information received from their suppliers, even though it lacks official certification.

Practical Tips

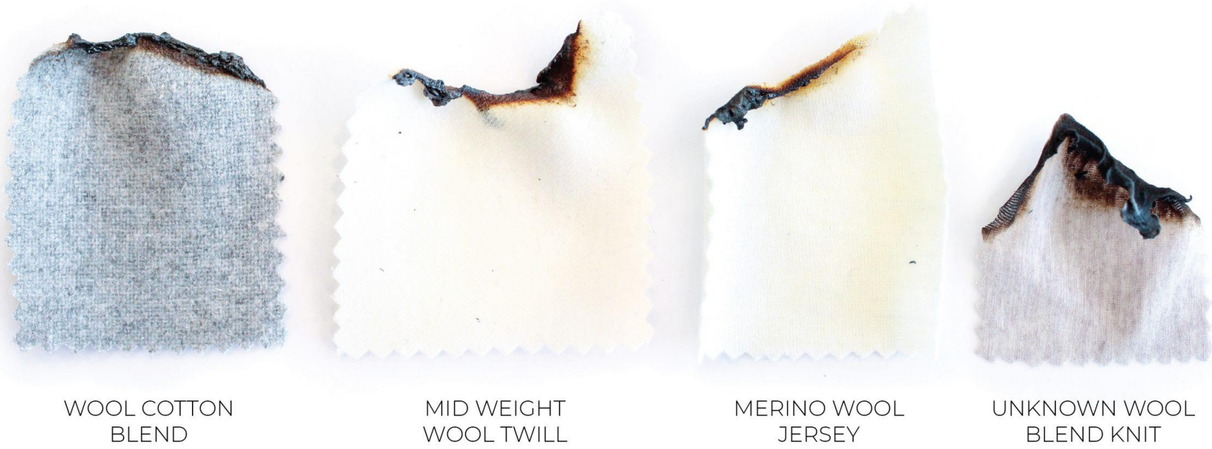
WASHING

ALWAYS pre-wash deadstock fabric to avoid shrinkage or any change in the look of the material (change in colour or texture)
It's important to make sure deadstock fabric doesn't shrink after washing so depending on the fibre it must be washed (for example, it's good to wash cotton deadstock fabric at least 30° to avoid later shrinkage)
A more risky way is to calculate shrinkage rate on a square 50cm X 50cm and then develop bigger patterns based on that rate.

Practical Tips

FIBER IDENTIFICATION

It’s important to recognise the fiber composing the deadstock fabric.
In case the supplier doesn’t give you any info, you can do the burn test by yourself, being very careful.



WOOL COTTON BLEND

MID WEIGHT WOOL TWILL

MERINO WOOL JERSEY

UNKNOWN WOOL BLEND KNIT

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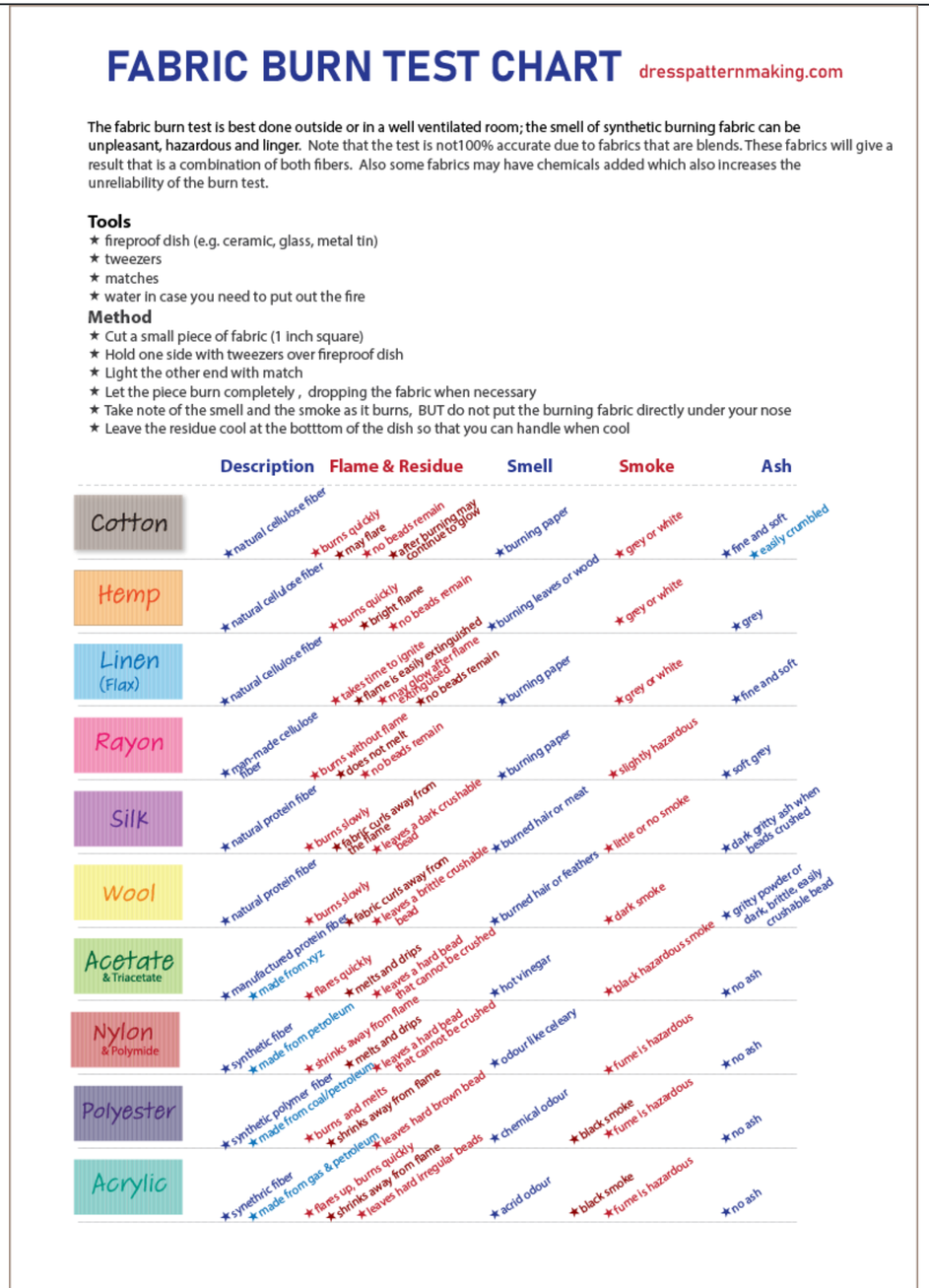
Practical Tips

FIBER IDENTIFICATION

For more info on textiles burning test, See Module 3 Unit 1



FABRIC BURN TEST CHART dresspatternmaking.com

The fabric burn test is best done outside or in a well ventilated room; the smell of synthetic burning fabric can be unpleasant, hazardous and linger. Note that the test is not100% accurate due to fabrics that are blends. These fabrics will give a result that is a combination of both fibers. Also some fabrics may have chemicals added which also increases the unreliability of the burn test.

Tools

- fireproof dish (e.g. ceramic, glass, metal tin)
- tweezers
- matches
- water in case you need to put out the fire

Method

- Cut a small piece of fabric (1 inch square)
- Hold one side with tweezers over fireproof dish
- Light the other end with match
- Let the piece burn completely , dropping the fabric when necessary
- Take note of the smell and the smoke as it burns, BUT do not put the burning fabric directly under your nose
- Leave the residue cool at the botttom of the dish so that you can handle when cool

	Description	Flame & Residue	Smell	Smoke	Ash
Cotton	natural cellulose fiber	burns quickly; may flare; no beads remain; after burning may continue to glow	burning paper	grey or white	fine and soft; easily crumbled
Hemp	natural cellulose fiber	burns quickly; bright flame; no beads remain	burning leaves or wood	grey or white	grey
Linen (Flax)	natural cellulose fiber	takes time to ignite; flame is easily extinguished; may glow after flame extinguished; no beads remain	burning paper	grey or white	fine and soft
Rayon	man-made cellulose fiber	burns without flame; does not melt; no beads remain	burning paper	slightly hazardous	soft grey
Silk	natural protein fiber	burns slowly; fabric curls away from the flame; leaves a dark crushable bead	burned hair or meat	little or no smoke	dark gritty ash when beads crushed
Wool	natural protein fiber	burns slowly; fabric curls away from the flame; leaves a brittle crushable bead	burned hair or feathers	dark smoke	gritty powder or dark, brittle, easily crushable bead
Acetate & Triacetate	manufactured protein fiber; made from xyz	flares quickly; melts and drips; leaves a hard bead that cannot be crushed	hot vinegar	black hazardous smoke	no ash
Nylon & Polymide	synthetic fiber; made from petroleum	shrinks away from flame; melts and drips; leaves a hard bead that cannot be crushed	odour like celeary	fume is hazardous	no ash
Polyester	synthetic polymer fiber; made from coal/petroleum	burns and melts; shrinks away from flame; leaves hard brown bead	chemical odour	black smoke; fume is hazardous	no ash
Acrylic	synthetic fiber; made from gas & petroleum	flares up, burns quickly; shrinks away from flame; leaves hard irregular beads	acrid odour	black smoke; fume is hazardous	no ash

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Natural Fibers

PRO / CONS

Pros:

- Breathable – Allows air circulation, keeping you cool.
- Soft & Comfortable – Gentle on the skin, reducing irritation.
- Biodegradable & Eco-Friendly – Decomposes naturally, reducing environmental impact.
- Moisture Absorption – Absorbs sweat and keeps the body dry.
- Temperature-Regulating – Wool and silk provide insulation while staying breathable.
- Hypoallergenic – Less likely to cause allergies or skin irritation.

Cons:

- Can Shrink or Wrinkle – Cotton and linen wrinkle easily and may shrink in washing.
- Less Stretchy – Lacks elasticity unless blended with synthetics.
- More Expensive – High-quality natural fibers like silk and wool are costly.
- May Require Special Care – Wool and silk need gentle washing or dry cleaning.

Synthetic fibers

PRO / CONS

Pros:

- Durable & Strong – Resistant to wear, tear, and stretching.
- Wrinkle-Resistant – Maintains shape and doesn't require ironing.
- Water-Resistant – Polyester and nylon dry quickly and don't absorb moisture.
- Affordable – Generally cheaper than natural fibers.
- Lightweight & Stretchy – Great for sportswear and activewear.
- Low Maintenance – Easy to wash and care for.

Cons:

- Less Breathable – Can trap heat and cause sweating.
- Can Cause Skin Irritation – Some people may find synthetics itchy or uncomfortable.
- Not Biodegradable – Takes decades or longer to decompose, contributing to pollution.
- Can Retain Odors – Absorbs and holds onto body odors more than natural fibers.

Fabric Handling

Create a 50X50 cm cardboard square and cut out a piece of the chosen fabric
Wash at 30° (machine wash is ok) and dry flat
Measure the dried fabric square again

Shrinkage Test

Do calculations, you square piece could have become 48cm in length and 47cm in width.

Based on the fabric examined previously, the shrinkage calculations will be as follows:

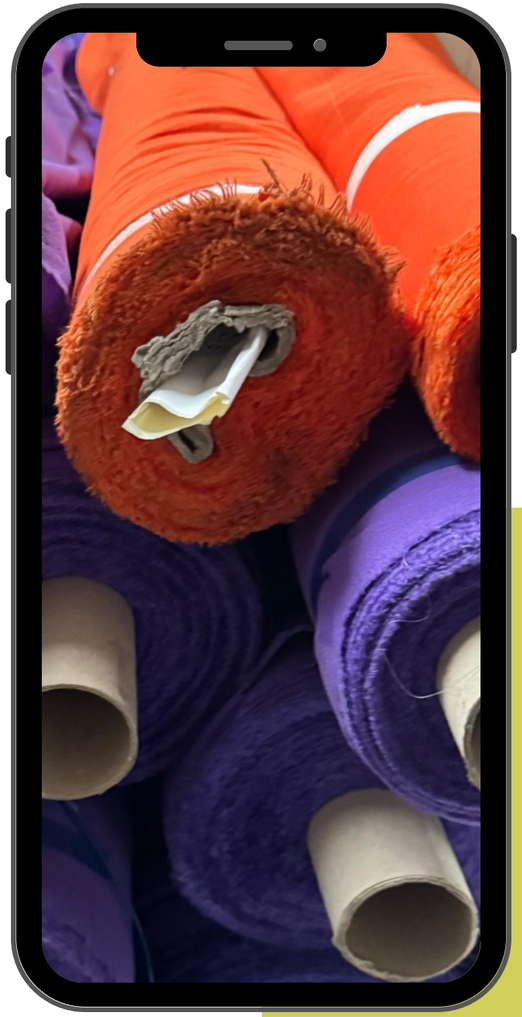
Length shrinkage = (50 – 48) / 50 * 100 = 4%
Width shrinkage = (50 – 47) / 50 * 100 = 6%

Tips

- Prevents size distortion after washing.
- Ensures fabric stability before cutting and sewing.
- Helps in choosing pre-shrunk fabrics for better fit and durability.

Never Out Of Stock

Within deadstock, a material that never goes out of stock is simply one that remains consistently available. These materials are maintained in inventory by mills, allowing brands to place orders at any time. To ensure a constant supply, mills must have a strong understanding of market demand for these fabrics. These fabric might include denim and simple jerseys.



UPCYCLING IDEAS

- Use fabric scraps for patchwork or appliqué embellishments.
- Use smaller pieces to design accessories like simple bags and hats or construction details like pockets.
- Deadstock fabrics are perfect for sampling and prototyping, reducing waste in the design development process
- Often deadstock fabrics spare creativity as you discover its unique qualities and properties

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UPCYCLING IDEAS

- Scraps of jersey fabric hand dyed and applied by hand on a stretch fitted dress. This layering technique makes the garment unique and more interesting adding texture and colour to the base layer.

- Small scraps sewn together with patchwork technique, material leftover from the making of a small production. This technique stimulates creativity in terns of colour and texture combinations. Remember that whenever you mix very different materials you should keep in mind care and washing instructions. Recommend a hand wash in warm water or a dry wash if that's the case.

UPCYCLING IDEAS

- Comme Des Garçons Homme Plus S/S2000

LEFT: simple T-shirt featuring small scraps of fabric overlapped and sewn on the garment with raw edge

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UPCYCLING IDEAS

- Scraps of deadstock brocade fabric for furniture leftover from the making of a cape style overcoat.

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UPCYCLING IDEAS

- Cape style overcoat
- Both right and wrong side of the fabric have been used to create a more dynamic look for such a solemn garment.
- Pieces were cutted depending on the pattern (see woven stripes created on the sleeves)
- Always consider features of every fabric, its hang, its weight and drape. The silhouette and volume of the garment depends mostly on the fabric choice.

Francesca Nicolosi Photographer / Eva Di Franco designer

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UPCYCLING IDEAS

- For the lining a silk taffetà helps keeping the silhouette structured and at the same time adds extra value to the garment. A very precious lining.

UPCYCLING IDEAS

- Sustainable fashion goes well with the concept of versatility and multi wearing.
- Giving the possibility to wear the piece based on the mood or the look it’s a form of creative freedom and active playing.
- This neck piece is made in a stripy sweat shirting fleece, it’s a simple rectangular shape with a drawstring on the top, which allows to fit the piece on different body types.

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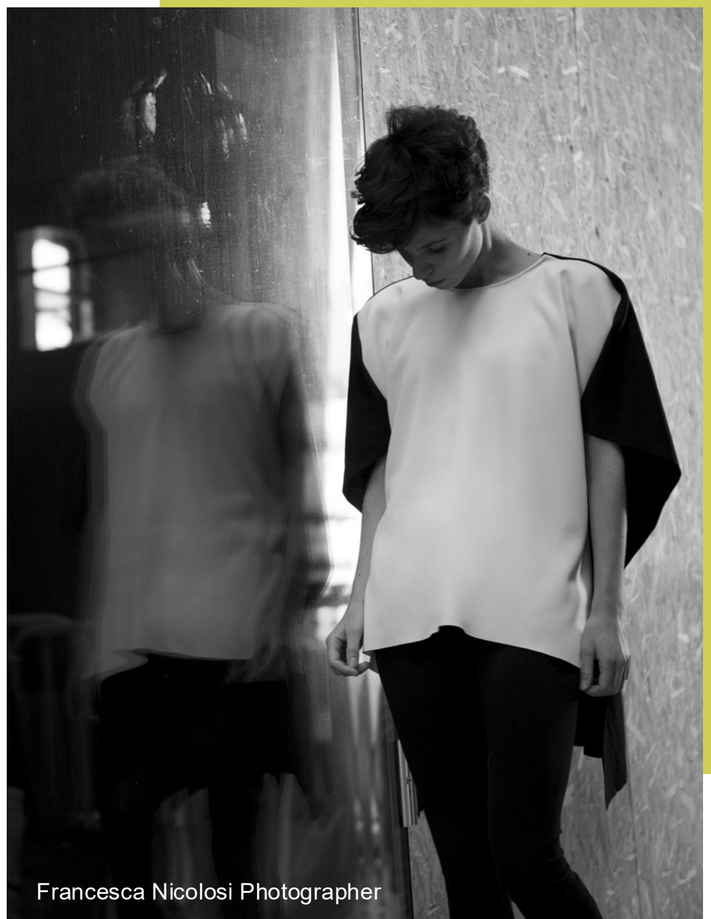
UPCYCLING IDEAS

ZERO WASTE APPROACH > Easy Make

- YIN YANG TOP> Here two big squared scraps were sewn together after being draped on the mannequin to figure out the shape of the garment.
- The bigger square was placed at the back.
- The sleeve area was created just folding the extra fabric on the front panel.
- Fabric has been pre-washed at 30°, although delicate machine wash is recommended to avoid colour fading.



Francesca Nicolosi Photographer

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UPCYCLING IDEAS

LET'S PLAY

- Also consider new ways of exploring the design, turning around the pinned fabric, in this case the two colour contrast highlights the asymmetry of the garment.

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UPCYCLING IDEAS

- As seen in the cape style overcoat, unexpected materials are fun and inspiring.
- Terrycloth is quite easy to find and usually comes in a wide colour palette.
- Woven patterns (on the right a honeycomb terrycloth) add value to a simple design.

Eva Di Franco designer

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Case study / Giacomo Bacci

The brand Giacomo Bacci was established in 2014 in Florence - an extremely inspiring environment in terms of creativity and tailoring tradition. Giacomo Bacci shirts stand out for their finely-tailored structure, whereby materials and fabrics are stitched together to create elaborated patterns, giving each item a unique identity.

Inspired by tradition and classical sartorial canons on hand, Giacomo Bacci designs seek, on the other, to innovate a garment whose history goes way back in time, but still open to contemporary.

The project is entirely shaped through the creative vision of Giacomo, who refined and developed his skills as a fashion designer throughout his studies in architecture, as well as through his continuous exchange with local artisans.

Availing himself of the mastery of highly-professional tailoring workshops, the designer was able to define each stage of the production process - sourcing its material in local stockists and vintage findings.

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From sweatshirt to jacket

01

The fabric

Handling the fabric

02

The design

Sketching

03

The pattern

Adjusting the pattern from top to jacket

04

The making

Final look

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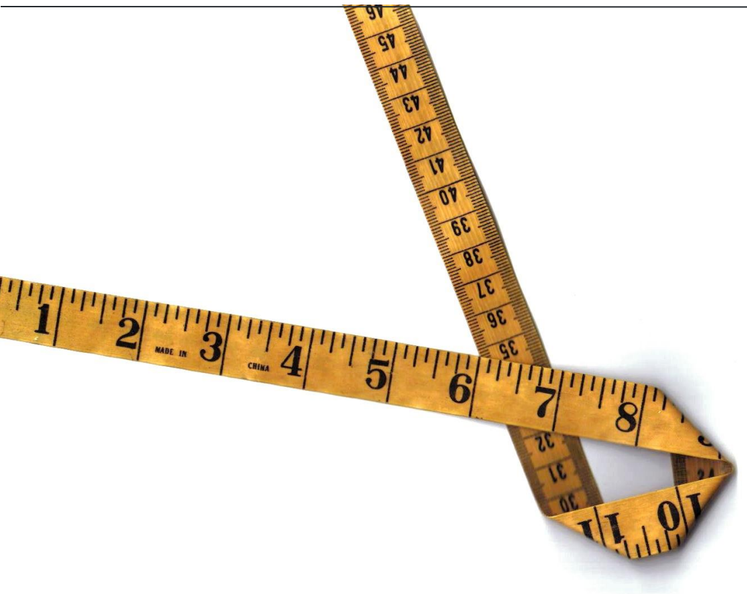


Practical application: the fabric / 1,30 hours

First do a shrinkage test to make sure the all fabric is heat set, unless is a delicate fiber like wool.
Precise shrinkage calculations contribute to the overall quality of your creations.
Customers value garments that retain their

Press the fabric following the finer requirements.

Analyse the fabric making sure you identify right side and wrong side.

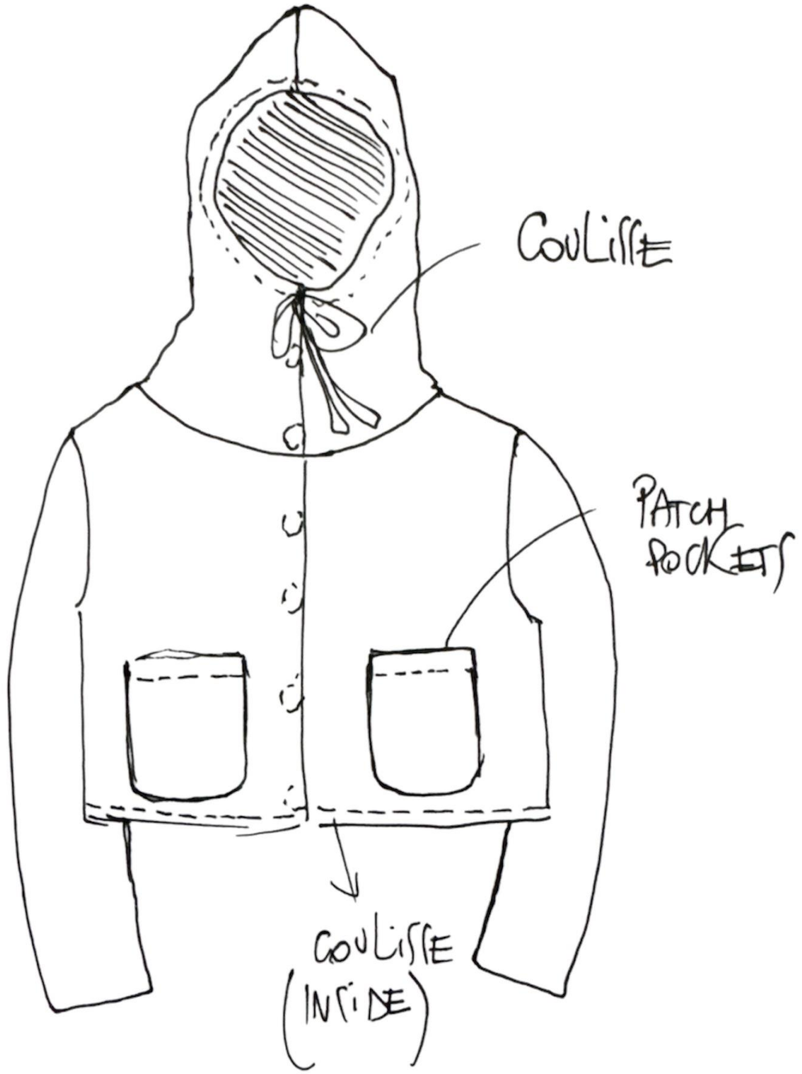
Think out of the box and be open to use the back side as the right side of the material: follow your preference unless there is a visible defect.

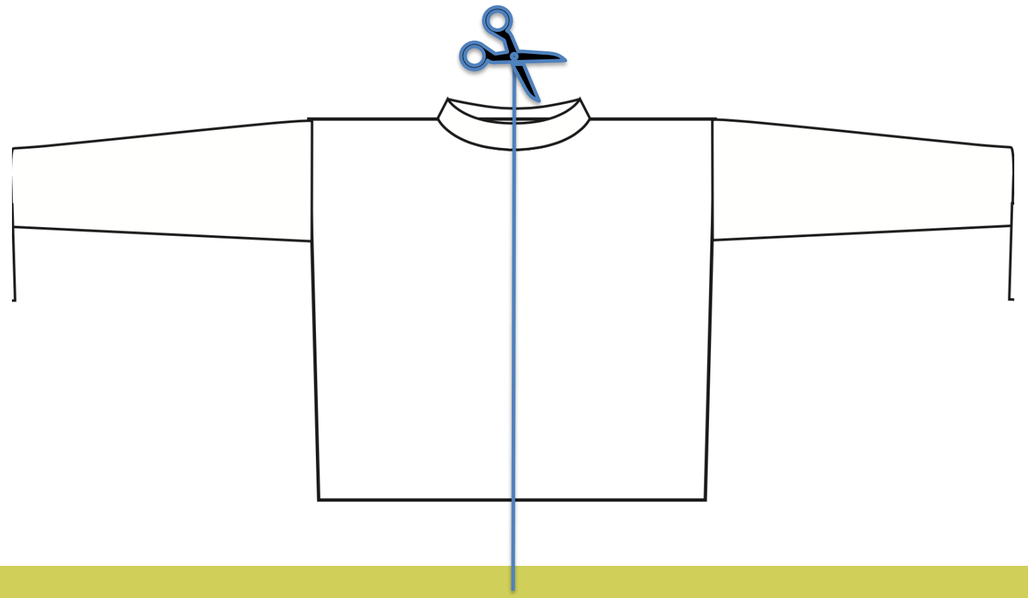
The following example features a mohair wolly fabric so no heat or shrinkage test was done on the shell fabric.

Lining: 100% viscose in contrast colour

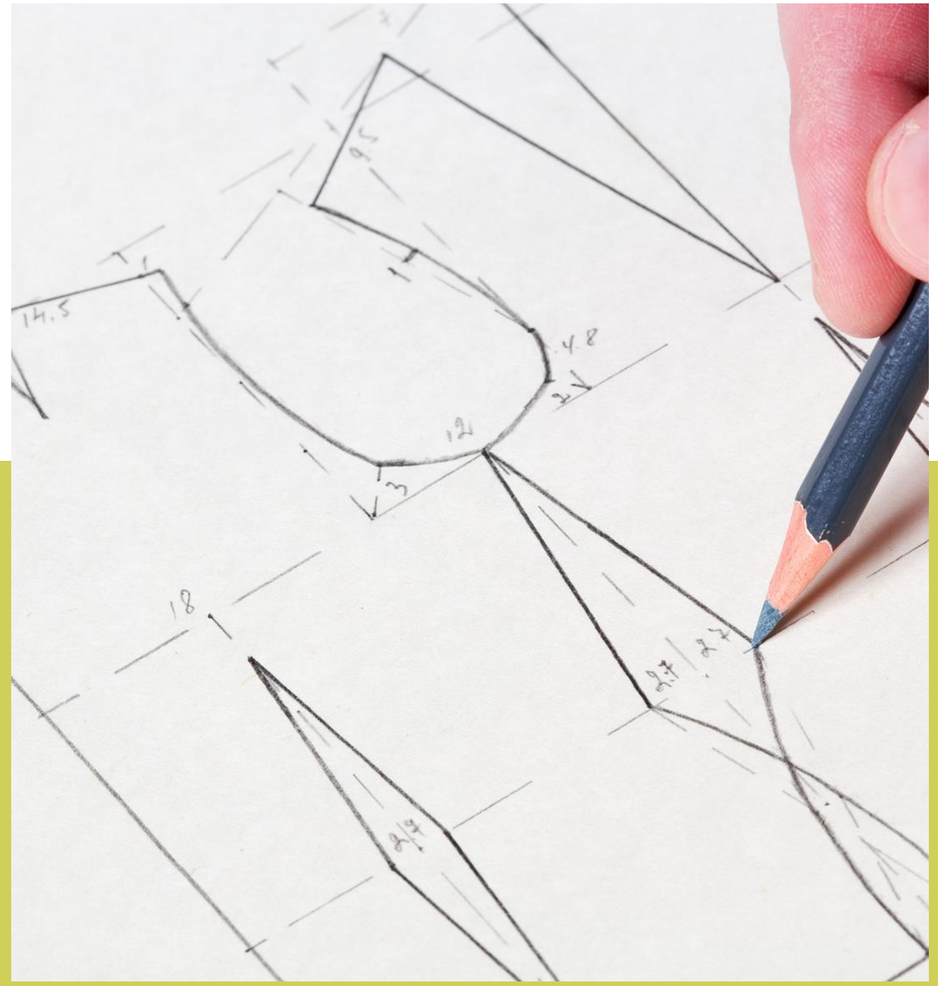
The design / 30 mins

Sketch for a hoodie jacket, featuring patch pockets and adjustable drawstring on the waistline. Construction details like drawstrings allow versatility and functionality.





Starting from a simple sweatshirt pattern.



The pattern / 3 hours

Copy the pattern from your favourite sweater
>>> see in notes “how to copy patterns from existing garments”

Make required adjustments based on your design

The original pattern was enlarged to make the fit more relaxed and comfortable, suitable for an outer layer.
This is the original top.
Lenghtwise 2cm were added
Widthways 3cm in total were added
Armhole was enlarged 3cm upwards

Pattern adjustments

The top has been cut in the center front to open the garment. Seam allowances were added based on the chosen fastening (snaps)

A hood was created and added to the structure

Patch pockets pattern was created

Pattern pieces for the lining and facing

Making / 4 hours

Make sure doesn't have a specific direction as it happens on velvet and some hairy fabric.

Cut the pattern pieces trying to optimise fabric usage and minimising waste.

Final Look

Finishings and details
hood drawstring in wool

Final Look

Lining with patch pocket
Drawstring around the waist

Analyse the fabric and see if the selvedge is worth keeping in the cut and showing on the outside of the garment as a sort of decoration.

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Unit Summary

This unit focuses on sourcing deadstock fabrics and fabric scraps as key materials for apparel design. It provides practical guidance on handling these materials to create durable, high-quality garments while adapting patterns to fit available fabrics. Emphasizing flexibility and experimentation, you will explore creative possibilities through techniques like draping (moulage) directly on the mannequin. The unit also encourages de-contextualization and innovative use of diverse fabrics to inspire unique designs.

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Notes

- How to copy patterns from existing garments
- How to do the burning test for fiber identification
- Deadstock fabrics are limited quantity, make sure you have enough fabric for your project!
- Consider seam allowances, pattern alterations and mistake. Ordering 10% more than quantity needed is recommended.
- Accept limitations and adopt a creative approach in design: utilize color-blocking methods to join smaller fabric pieces together.
- Use strategic seam placement to navigate and conceal fabric imperfections
- Always ask your supplier the origin of the material and its composition.