TSCT

TECHNOLOGY STATION
CLOTHING AND TEXTILES

SHORT LEARNING PROGRAMME 2024

Cape Peninsula University of Technology

creating futures

technology innovation AGENCY

Innovating Tomorrow Together

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SHORT LEARNING PROGRAMME 2024

MANUFACTURING ADVISORY SERVICES

Manufacturing audits and assessments
Industrial engineering services for productivity improvement

Implementation of quality systems
Advice acquisition of new or improved technology

PRODUCT TESTING AND ANALYSIS

Tensile strength
Martindale Abrasion
Burst Strength
Air permeability
Fault Analysis

NB We do an extensive collection of additional tests.

Woolworths Correlated Laboratory

TECHNOLOGY SUPPORT CENTRE

Electronic button-hole machine
Electronic button-sew on machine
Electronic bar-tacking machine
Electronic eyelet button-hole machine
Cover seam machine (elasticating)
Merrow edge machine, Hemming machine
Walking foot machine
Ultrasonic welding machine
Jet pocket machine
Feed off the arm machine

SMART ORGANIZATION

Clustering of small businesses
Network facilitation

RESEARCH

Product and process development
Anthropometry (body sizing using 3D body scanner)
Harmful substances determination in textiles
Antimicrobial textiles
Industry & academic consultations
PPE and Medical textiles

HUMAN CAPITAL DEVELOPMENT

Offer a menu of short learning programmes
Offer learnerships as a host training provider in conjunction with qualifying firms

PRODUCT DEVELOPMENT

Technical drawings
Pattern development (Gerber software)
3D simulation and 3D Body scanning

Mock up sample making
Product assembly
Pattern grading
Textile specifications

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science & innovation
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

An initiative of the Department of Science and Innovation

HUMAN CAPITAL DEVELOPMENT

Short Learning Programme overview

On a specifically Human Capital Development the TSCT offers a menu of SHORT LEARNNG PROGRAMMES to the Clothing, Textiles, and related industry. The short learning programme schedule is revised on an annual basis and depends on the industry to guide us in terms of our programme mix.

The programme mix includes the following areas of expertise:

- Pre-Production Technology
- Textiles
- Quality
- Manufacturing; and
- Information workshops

All short learning programmes are governed by the CPUT Centre for Professional and Personal Development (CPPD) Short Course Policy and the Teaching and Learning Policy. Programmes are offered in a range of permutations, with more popular options of a one-day-per-week basis or a Saturday morning. If required, programmes can be offered after normal working hours to minimise disruptions to the manufacturing process.

The latter, however, will only be considered based on the minimum number of confirmed applications received for the course.

The main objective is to support the clothing, textile, and related industries to develop staff to meet organisational objectives and improve its competitiveness in the market.

For a menu of short courses on offer, kindly click on the following link:
https://www.cput.ac.za/academic/shortcourses/fields/7871-clothing-and-textiles

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Contact details

TRAINING COORDINATOR

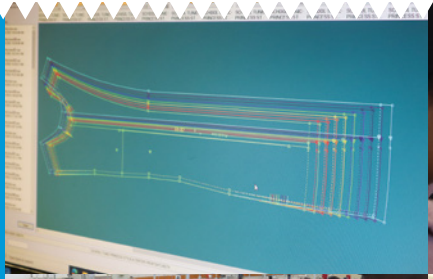
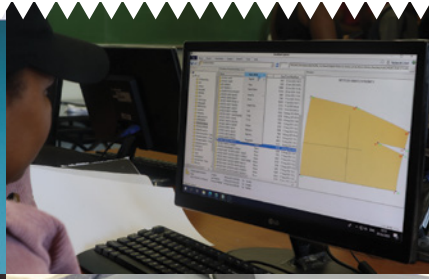
Karin Hock

t (021) 959 6075
e vanwykk@cput.ac.za
W https://tsct.co.za/human-capital-development/

FRONT DESK

Lisa Marthinus

t (021) 959 6826
e techstation@cput.ac.za
082 895 9327
W https://tsct.co.za/

fields of study

PRE-PRODUCTION TECHNOLOGY

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
PATTERN DEVELOPMENT 1 Pattern Development Level 1 is an extensive course designed to equip students with a solid foundation in pattern making for fashion and garment design. This 120-hour course covers a wide range of topics, from measurements to advanced pattern manipulation techniques. **Prerequisite: Grade 12**	By the end of the course, students should be able to: • Demonstrate a deep understanding of pattern development principles. • Accurately take and interpret complex body measurements. • Create patterns for a variety of garments. • Apply advanced pattern manipulation techniques. • Solve pattern-related problems.	30 weeks, 4 hours/week Saturdays 08h30 – 12h30 **02 March 2024**	**R10 200.00**
PATTERN DEVELOPMENT 2 Pattern Development 2 is an advanced course designed to further enhance your skills in pattern making and garment construction. This 120-hour course will cover complex pattern development techniques, advanced sewing methods, and the application of patternmaking principles in creating custom-designed garments. Students will gain a deeper understanding of pattern manipulation, fit, and garment construction. **Prerequisite: Pattern Development 1**	By the end of the course, students should be able to: • Demonstrate advanced patternmaking skills. • Apply complex pattern manipulation techniques. • Construct custom-fit garments using advanced sewing methods. • Interpret and create patterns for a variety of clothing styles. • Develop the ability to design and create original garments. • Understand the principles of fit, draping, and garment balance.	30 weeks, 4 hours/week Saturdays 08h30 – 12h30 **16 March 2024**	**R11 200.00**

PRE-PRODUCTION TECHNOLOGY

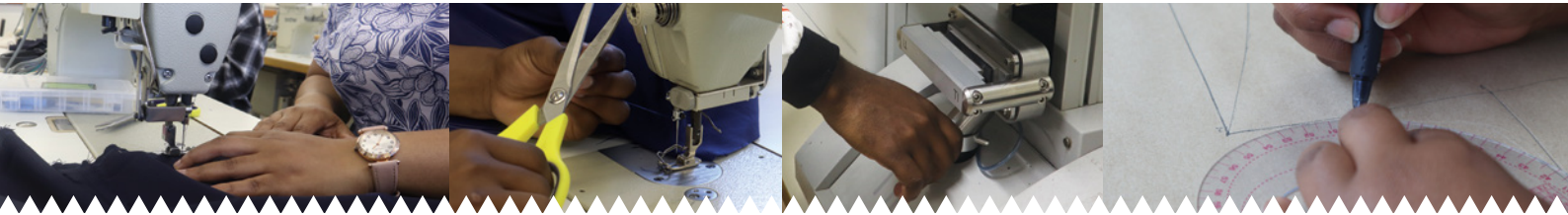
COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
INTRODUCTION TO GARMENT TECHNOLOGY This 80-hour course introduces students to pattern making and garment construction. Students will learn essential skills for creating patterns, cutting fabric, and assembling garments. The course combines theoretical knowledge with practical hands-on experience to empower individuals with the ability to design and create their clothing. **Prerequisite: Grade 12**	By the end of the course, students should be able to: • Understand the fundamentals of pattern making and garment construction. • Learn how to create basic patterns for various garments. • Develop the skills to cut fabric accurately and assemble garments. • Gain an appreciation for fashion design and clothing construction. • Create finished garments.	20 weeks, 4 hours/week Saturdays 08h30 – 12h30 **02 March 2024**	**R11 750.00**
MANUAL PATTERN GRADING Manual pattern grading is an essential skill in the field of fashion design and garment production. This 16-hour course will take you through the fundamentals of pattern grading, teaching you how to transform a basic pattern into various sizes. You will learn the techniques, tools, and principles required to create graded patterns, ensuring a perfect fit for your target audience. Whether you're a beginner or an experienced pattern maker, this course will enhance your skills and broaden your understanding of pattern grading. **Prerequisite: Grade 12**	By the end of the course, students will be able to: • Understand the fundamentals of pattern grading. • Grasp the essential principles of pattern grading for different types of garments. • Apply manual pattern grading techniques to create graded patterns. • Develop a range of sizes for a given pattern while maintaining proper fit and proportions. • Identify common grading errors and how to rectify them. • Create a graded pattern for production garment.	4 weeks, 4 hours/week Saturdays 08h30 – 12h30 **TBC**	**R 3 000.00**

TECHNOLOGY AIDED

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
COMPUTER PATTERN MAKING & GRADING This course will provide an in-depth understanding of computer patternmaking software, which is widely used in the fashion and apparel industry. Participants will learn how to create digital patterns, grade patterns, and generate marker layouts for efficient fabric utilisation. **Prerequisite: Basic computer literacy skills with a Pattern Development 1 certificate or a good understanding of pattern making**	By the end of the course, learners will be able to: • Understand the basics of computer pattern making. • Create and modify digital patterns. • Learn to grade patterns for different sizes. • Generate marker layouts for optimal fabric usage. • Develop the skills needed to work with Gerber software in a professional setting.	16 weeks, 4 hours/week Saturdays 08h30 – 12h30 **13 April 2024**	**R10 500.00**
COMPUTER GRADING This course provides a comprehensive introduction to computer pattern grading, a critical process in the apparel and fashion industry. Participants will learn how to use digital tools to scale and adjust patterns efficiently, reducing manual labour and improving accuracy. **Prerequisite: Basic computer literacy skills with Pattern Development 1 certificate or a good understanding or have working experience of pattern making**	By the end of this course, learners should be able to: • Have a good understanding of computer pattern grading techniques, • Be proficient in using CAD software for grading, Will have completed a practical project that demonstrates their skills in pattern grading.	4 weeks, 4 hours/week Saturdays 08h30 – 12h30 **TBC**	**R 3 700.00**

TECHNOLOGY AIDED

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
BASIC MS WORD & EXCEL This 48-hour short course is designed to provide beginners with a comprehensive understanding of Microsoft Word and Microsoft Excel. Participants will learn essential skills and practical applications for both Word and Excel, enabling them to create documents, spreadsheets, and enhance their productivity. **Prerequisites: Basic computer skills with access to a computer/laptop to practice**	By the end of this course, learners should be able to: • Understand the fundamental features and functions of MS Word and MS Excel. • Create, format, and edit documents in MS Word. • Create, format, and manipulate spreadsheets in MS Excel. • Perform basic data analysis and calculations using Excel. • Develop practical skills for day-to-day personal and professional use.	12 weeks, 4 hours/week 12 x Saturdays 08h30 – 12h30 **11 May 2024**	**R 7 150.00**



TEXTILES TECHNOLOGY

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
TEXTILES and FABRICS This comprehensive 28-hour short course on textiles and fabrics will take you on a journey through the world of textiles, from the basics of raw materials and production processes to design and fashion applications. Whether you're a beginner or a budding fashion enthusiast, this course will provide you with a solid foundation in textiles and fabrics. **Delegates are invited to bring fabric swatches and garments to class for discussion & problem-solving.**	By the end of the course, learners will: • Have a deeper understanding of textiles and fabrics, their production processes, and their applications in various industries, particularly in the world of fashion. • Be better equipped to make informed choices about fabric selection and textile care.	7 weeks, 4 hours/week Wednesdays 12h30 – 16h30 **13 March 2024** *(Please enquire about a customised option for your company for +10 participants)*	**R 6 300.00**
TEXTILE TESTING This 16-hour course on Textile Testing provides a comprehensive introduction to the various techniques and methods used to test and evaluate textiles for quality, safety, and performance. Participants will gain a thorough understanding of textile testing standards, equipment, and procedures commonly employed in the textile industry. **Prerequisite: Industry-related work experience**	By the end of the course, learners will: • Have a deeper understanding of textiles and fabrics, their production processes, and their applications in various industries, particularly in the world of fashion. • Be better equipped to make informed choices about fabric selection and textile care.	2 consecutive weekdays 09h00 – 16h00 **May 2024** **TBC**	**R 3 150.00**

MANUFACTURING

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
SMART SKILLS FOR SUPERVISORS The Smart Skills for Supervisors course is designed to equip individuals with the essential skills and knowledge required to excel in a supervisory role. Whether you are a new supervisor looking to build a strong foundation or an experienced one aiming to enhance your leadership abilities, this course will provide you with the tools and strategies needed to thrive in a supervisory position. **The course includes a blend of theoretical knowledge, practical exercises, case studies, and interactive discussions to ensure a well-rounded learning experience.**	This comprehensive course will provide supervisors with: • Supervisors will be better equipped to lead teams, communicate effectively, resolve conflicts, manage performance and drive success in their organisations.	7 weeks, 1 day per week Tuesdays 09h00 – 16h00 **12 March 2024**	**R 9 100.00**
GARMENT COSTING This 32-hour course on Garment Costing is designed to equip participants with the knowledge and skills needed to accurately calculate and analyse the costs involved in the production of garments. It covers various aspects of costing, from raw materials to labour and overheads, enabling students to make informed decisions in the fashion and textile industry.	By the end of the course, participants will be able to: • Understand the fundamentals of garment costing. • Calculate material costs, including fabric, trims, and accessories. • Estimate labour costs and productivity. • Evaluate overhead costs. • Determine the total cost of a garment. • Analyse cost breakdowns and make cost-effective decisions.	7 weeks, 1 day per week Tuesdays 09h00 – 16h00 **07 May 2024**	**R 5 300.00**

MANUFACTURING

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
PRODUCTION MANAGEMENT This Production Management short course is designed to provide participants with a comprehensive understanding of the principles and practices of effective production management in various industries. It covers key concepts, strategies, and tools necessary to optimise production processes and maximise efficiency.	By the end of this course, participants will be able to: • Understand the fundamentals of production management. • Apply production planning and scheduling techniques. • Implement quality control and improvement strategies. • Optimise resource utilisation in production. • Manage supply chains and logistics effectively. • Develop strategies for continuous improvement.	14 weeks, 4 hours/week Every alternative Saturday 08h30 – 12h30 **06 April 2024**	**R10 500.00**
BASIC WORK STUDY The Basic Work Study Short Course is designed to introduce participants to the fundamental principles of work study, focusing on methods such as time and motion study, work measurement, and process analysis. This course aims to equip learners with the essential skills and knowledge required to optimise work processes, improve productivity, and reduce inefficiencies in various industries.	By the end of this course, participants will be able to: • Understand the principles and concepts of work study. • Apply time and motion study techniques to analyse work processes. • Perform accurate work measurement. • Identify and eliminate bottlenecks and inefficiencies in work processes. • Improve productivity and optimise resource utilisation. • Implement basic ergonomic principles for improved workplace design. • Interpret and present work study data effectively	10 weeks, 4 hours/week Saturday 08h30 – 12h30 **06 April 2024** **Optional:** 5 weeks, 1 day /week 09h00 – 16h00 *(Based on demand)*	**R 6 700.00**

MANUFACTURING

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
INTERMEDIATE WORK STUDY This course is designed to help participants build upon their basic understanding of work study principles and techniques. It covers a range of topics to enhance their skills in optimising work processes and efficiency. **Prerequisite: Basic Work Study**	This course aims: • To deepen participants' understanding of work study principles and techniques. • To equip participants with advanced tools and methodologies for analysing and improving work processes. • To develop participants' skills in optimising work efficiency and resource utilisation. • To provide practical hands-on experience through case studies and exercises.	10 weeks, 4 hours/week Saturday 08h30 – 12h30 **06 July 2024** **Optional:** 5 weeks, 1 day /week 09h00 – 16h00 *(Based on demand)*	**R 7 500.00**
CUTTING ROOM MANAGEMENT This course is designed to provide participants with a comprehensive understanding of managing a cutting room in the context of the textile and garment industry. Participants will learn about various aspects of cutting room management, including workflow optimisation, quality control, resource allocation, and team coordination.	By the end of this course, participants will: • Understand the key processes in a cutting room. • Implement efficient workflow strategies to improve productivity. • Manage resources effectively, including machinery and personnel. • Ensure quality control and minimise wastage. • Lead and coordinate a cutting room team for optimal results. • Apply industry best practices for cutting room management.	5 weeks, 1 day per week Saturdays 08h30 – 12h30 **TBC**	**R 4 400.00**

QUALITY

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
QUALITY CONTROL IN CLOTHING Quality Control in Clothing Manufacturing is designed to provide participants with a comprehensive understanding of quality control processes in the apparel industry. Participants will learn essential skills and techniques to ensure the production of high-quality clothing while minimising defects and improving efficiency. The course covers various aspects of quality control, from fabric inspection to finished product evaluation, and emphasises the importance of maintaining quality standards in the competitive world of clothing manufacturing.	By the end of this course, participants will be able to: • Understand the importance of quality control in clothing manufacturing. • Identify and rectify common defects in clothing production. • Implement effective quality control processes throughout the manufacturing cycle. • Utilise appropriate tools and techniques for quality assessment.	6 weeks, 1 day per week Wednesdays 12h30 – 16h30 **15 May 2024**	**R 6 650.00**

QUALITY

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
FABRIC QUALITY INSPECTION & FAULTS CLASSIFICATION This course is designed to equip participants with the knowledge and skills required for inspecting fabric quality and classifying various faults that can occur in textiles. Participants will learn about different types of fabrics, quality standards, inspection techniques, and how to categorise and report fabric faults effectively.	At the end of the course, participants will: • Understand the importance of fabric quality inspection in the textile industry. • Learn how to identify and classify common fabric faults. • Develop proficiency in fabric inspection techniques and equipment. • Gain the ability to create comprehensive quality inspection reports. • Apply quality standards and best practices in fabric inspection.	4 weeks, 1 day per week Tuesdays or Wednesday 12h30 – 16h30 **03 July 2024** *(Please enquire about the in-house group option available for companies with 5+ applicants)*	**R 3 400.00**
QUALITY AWARENESS FOR SUPERVISORS & OPERATORS This course is designed to help supervisors and operators in clothing manufacturing gain a deeper understanding of quality control and assurance processes to ensure the production of high-quality garments.	At the end of the course, participants will: • Understand the importance of quality in clothing manufacturing. • Learn quality control techniques and best practices. • Improve communication and collaboration between supervisors and operators. • Identify and resolve common quality issues in clothing production.	2 weeks, 1 day per week Saturdays 08h30 – 12h30 **TBC** *(In-house group option preferred for +8 participants with a maximum of 20)*	**R 3 400.00**

INFORMATION WORKSHOPS (available for groups, inhouse or on-campus option considered. Minimum 8 participants. Dates per workshop will be communicated)

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
THE PRODUCT DEVELOPMENT PROCESS Understand the various stages involved in the process of developing a fashion product (new item or improvement of an already established product) **Outline: The Product life cycle; Stages in the product development process; Technical challenges in product development (patterns, material etc.); Product development for manufacturing. Cost control in product development**	• To provide an in-depth understanding of the clothing manufacturing process. • To guide participants through the entire product development cycle. • To equip participants with the knowledge and tools to create and launch clothing products successfully.	09h00 - 16h00	**R 1 300.00**
GARMENT SPECIFICATIONS A Garment Specifications Workshop is designed to inform participants about the crucial aspects of creating detailed and accurate garment specifications. These specifications are essential for ensuring that garments meet quality standards and production requirements ensuring customer expectations are met.	• Understand the importance of garment specifications in the fashion and textile industry. • Learn how to create accurate and comprehensive garment specifications. • Gain hands-on experience in developing garment specifications. • Explore common challenges and best practices in the garment specification process. • Learn how to use garment specifications to ensure quality control and efficient production.	09h00 - 16h00	**R 1 300.00**

INFORMATION WORKSHOPS (available for groups, inhouse or on-campus option considered. Minimum 8 participants. Dates per workshop will be communicated)

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
GARMENT COSTING This workshop is designed to provide participants with a comprehensive understanding of garment costing in the fashion and apparel industry.	• Understand the importance of accurate garment costing in the fashion industry. • Learn the key components and factors involved in calculating garment costs. • Gain hands-on experience in cost calculation and analysis. • Develop the skills to make informed decisions related to pricing and profitability.	09h00 - 16h00	**R 1 300.00**
FABRIC KNOWLEDGE A workshop on fabric knowledge is an excellent opportunity to educate participants about different types of fabrics, their properties, and their practical applications.	• To introduce participants to various types of fabrics. • To educate participants about the properties and characteristics of different fabrics. • To help participants understand the practical applications of different fabrics in fashion, design, and more. • To provide hands-on experience in identifying and working with fabrics. • To encourage participants to make informed fabric choices for their projects.	09h00 - 16h00	**R 1 300.00**

INFORMATION WORKSHOPS (available for groups, inhouse or on-campus option considered. Minimum 8 participants. Dates per workshop will be communicated)

COURSE TITLE & DESCRIPTION	COURSE OBJECTIVES	DURATION	COST
SIZE & FIT This workshop provides a comprehensive introduction to size and fit in fashion, with hands-on activities to help participants develop practical skills in measuring, altering, and customising garments.	• To understand the importance of proper sizing and fit in fashion. • To learn how to measure and assess body sizes accurately. • To explore various techniques for achieving the right fit in clothing.	09h00 - 16h00	**R 1 300.00**
UNDERSTANDING GARMENT CONSTRUCTION This workshop is designed for beginners and intermediate-level individuals interested in fashion, sewing, or garment design. Participants will gain a comprehensive understanding of garment construction, from pattern preparation to sewing techniques.	• To provide participants with a comprehensive understanding of garment construction, from basic sewing techniques to advanced concepts, enabling them to create and modify garments with confidence.	09h00 - 16h00	**R 1 300.00**

how to apply

This application form must be completed in full by all students who are applying for a short course at the Cape Peninsula University of Technology and certified copies of all supporting documents must be enclosed. Once this application form has been completed and the supporting documents are attached, it must be submitted to the course administrator responsible for the short course that you will be attending. Once your application has been accepted and processed the course administrator will issue you with a student number.

DOWNLOAD THE APPLICATION FORM FOR THE SHORT COURSE:
https://www.cput.ac.za/storage/short_courses/CPUT_Application_Form_Short_Courses.pdf

DOCUMENT REQUIREMENTS

The supporting documents listed below are documents to be submitted with your application form. Ensure that certified copies are less than three months old. CPUT reserves the right to take legal action if documents are not authentic.

- ✓ **A certified copy of the first page of your Identity Document/Card.**
- ✓ **Proof of your highest level of school education.**
- ✓ **International students must submit a valid study visa and proof of medical insurance for the duration of their studies.**

PAYMENT OF FEES

Short course fees are payable in full, prior to the commencement date of the course.

Cash payments can be made at the Cashiers Office on the campus. Provide the cashier with your student number (that had been issued to you by the course administrator) as a reference when making payment.

Should you make payment using electronic payment transfer (EFT), **please use a student number quoted on the statement and/ or invoice**. Please forward proof of payment to the course administrator.

IF YOUR EMPLOYER IS PAYING YOUR COURSE FEE AND SUCH EMPLOYER IS:

A government department or parastatal - A letter must be obtained in which the employer commits to paying the course fee - An invoice will then be sent to the employer by the course administrator.

A company or other corporate entity – Payment should be made prior to the commencement of the course or a signed Service Level Agreement (SLA), from the company or sponsor, acknowledging the company/person taking responsibility to pay the account on behalf. This SLA must be submitted with the application form. Kindly note, that this does not include a "third party" payment arrangement.

COURSE REQUIREMENTS

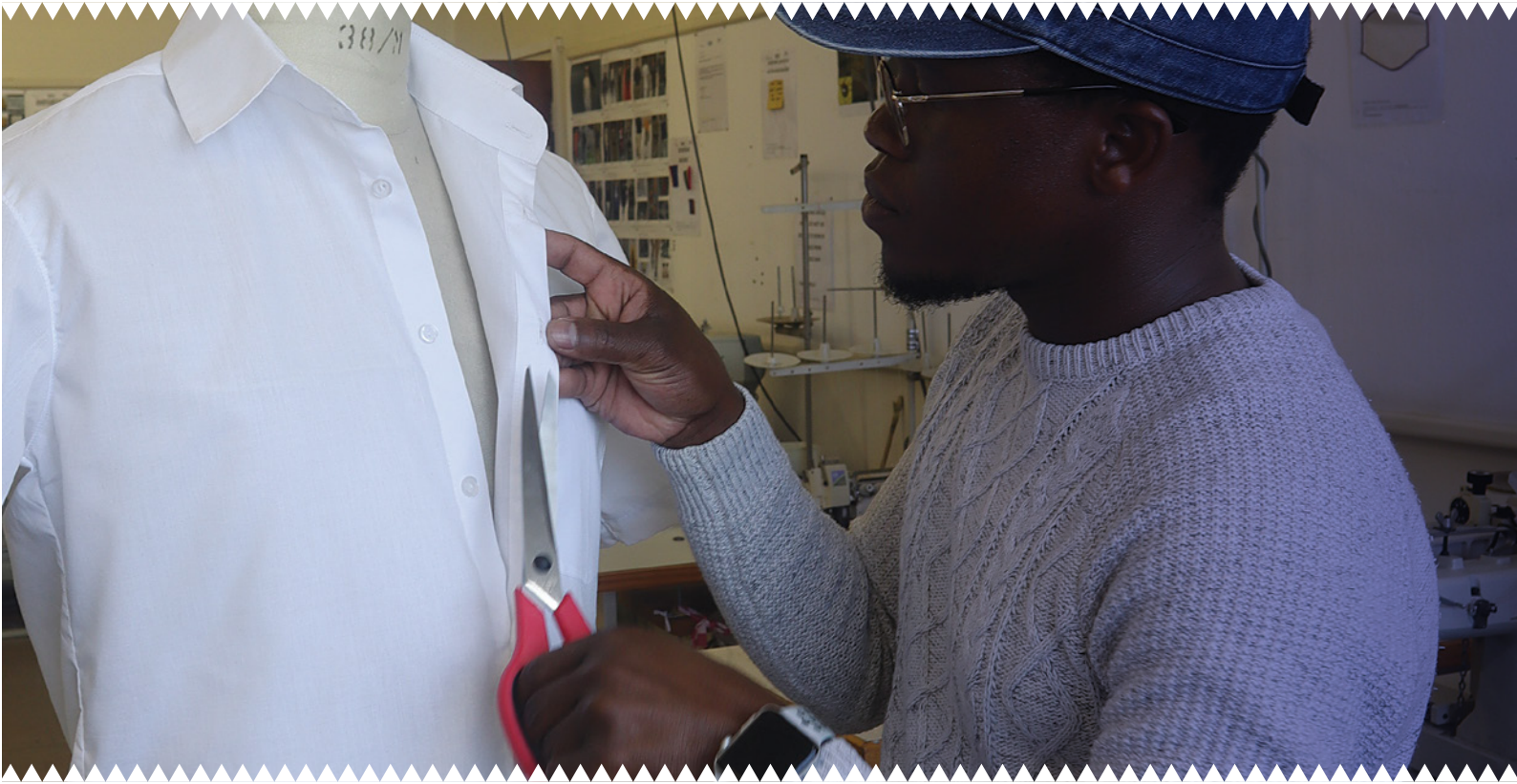
Although a matric certificate is not required when enrolling on an industry-recognised short course, we urge companies to be mindful of the course content and the level of complexity when selecting staff. Most of our courses are benchmarked against level 5 of the National Qualifications Framework. If in doubt, please discuss the prerequisites with the course coordinator before enrolling as a delegate.

ASSESSMENTS AND CERTIFICATION

Delegates will be assessed continuously, in accordance with the assessment policy of the institution. Failure to complete assessments could result in the delegate being suspended from the course. Companies are urged to take an active interest in the progress of the delegates and to assist with assignments and exposure to areas of interest.

Certificates are only issued to candidates who have successfully completed all the assessment requirements.

- A statement of results will be issued to those who were not successful.
- Certificates/the statement of results will only be issued once fees are settled in full.
- Replacement of lost or damaged certificates: Damaged or lost certificates are replaced at a predetermined cost as per CPUT Short Course Policy



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+27 (0)21 959 6767
info@cput.ac.za
@cput

@wearecput
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