



3D Apparel Design & Integration Certificate Program

<p><b>Brief Program Description</b></p>	<p><i>In this dynamic industry-led program, students will accelerate their experience and proficiencies in technical apparel design, development and manufacturing through strategic exposure to advanced material sciences, product engineering and global business skills. Students will be introduced to a vast variety of garment finishing and garment construction methods (focus on athletic and outerwear) while learning the importance of technical management and communication when utilizing specialty finishes and constructions. This course focuses on Material Sciences, Dynamic Pattern Making, 3D Fit Technology &amp; Design Rendering as well as Advanced Technical Apparel Product Engineering. The course will start with an overview and appreciation of the global supply chains. Students will learn the skills of clear communication, negotiation, creative problem solving, product engineering &amp; management and Dynamic Pattern Making.</i></p> <p><b><i>Student will be proficient in Gerber, Clo3D and Browzwear</i></b></p>
<p><b>Career Occupation* (if applicable)</b></p>	<p><i>Technical Designer: Junior / Senior 3D Technical Developer Design Consultant Production Planner / Manager Product Developer Sample Maker Pattern Technician Sourcing Manager 3D Designer Developer Head of Product / Development Operations Lead / Manager</i></p>
<p><b>Admission Requirements</b></p>	<p><i>Fashion Diploma from an apparel design or adjacent technical program, with 2+ years practical relevant work experience, or Bachelor of Design (Fashion Design, Industrial Design, Graphic Design or Engineering Science. Mid-career professionals in design and related industries.</i></p> <p><i>Candidates' approval via successful completion of: 250-word letter of intent/Admissions essay, Admissions interview Resume and references</i></p>

	<p><i>Portfolio</i>  <i>English language proficiency levels as detailed by TCFDA</i></p> <ul style="list-style-type: none"> <li>● All applicants must be able to read, write, and communicate in the English language.</li> </ul> <p>Language Proficiency Requirements: IELTS (Academic Format) 5.5 band. TOEFL 75 (IBT) TOEFL 197 (CBT) TOEFL (Paper) TOIC (Academic test) 650. Cambridge (FCE). Students can also meet the language requirements by meeting the agreed English language pathways between The Cut Fashion Design Academy and its English Language Pathway Partner Institutions. Or if the student has studied for at least 2 years at secondary or post-secondary level in a country where English is the 1st language, and all courses were taught in English (Transcript/ and supporting letter will be required).</p> <p>In special circumstances to be assessed and approved by the Director of Operations &amp; Admissions applicants can meet the language requirements by completing one of the two language tests below:</p> <p><b>Canadian Language Benchmark Placement Test (CLBPT) with a minimum level 6, and the Duolingo Language Test are accepted in some circumstances at a minimum score of 85-90.</b></p>
<p>Learning Objectives*</p>	<p>Upon completion of this program the successful student will have reliably demonstrated the ability to:</p> <p><i>Understand the different types and classification of technical raw materials and their influence on comfort, fit and quality.</i></p> <p><i>Identify, validate and define properties and claims of technical materials, trims and methods of construction to achieve the design vision of the product.</i></p> <p><i>Analyze and compare the sourcing and usage of fibres, fabrics, trims and finishes in Technical Apparel Development.</i></p>



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	<p><i>Use up to date industry standards, procedures and timelines to cover the topics of testing, material selection and commercialization.</i></p> <p><i>Problem solves technical patterning by identifying and resolving issues related to fit correction, end to end processing, Gerber and 3D design.</i></p> <p><i>Choose appropriate designs, fabrications, constructions and finishings.</i></p> <p><i>Negotiate, communicate, and manage projects professionally.</i></p> <p><i>Manage content systems and PLM platforms efficiently.</i></p>																																				
<p><b>Method(s) of Evaluation*</b></p>	<p><i>One on one, informal instructor feedback.</i></p> <p><i>Written feedback on in-class and homework assignments</i></p> <p><i>Final Evaluations will entail the creation of a custom portfolio or portfolio examples.</i></p>																																				
<p><b>Completion Requirements*</b></p>	<p><i>Students must receive an average of 75% from all the assignments.</i></p> <p><i>In order to pass the program.</i></p> <table border="1" data-bbox="634 1350 1222 1837"> <thead> <tr> <th>GíakC</th> <th>ScalC</th> <th>US GíakC</th> <th>NotCs</th> </tr> </thead> <tbody> <tr> <td>A+</td> <td>90.00 - 100.00</td> <td>A+</td> <td></td> </tr> <tr> <td>A</td> <td>85.00 - 89.99</td> <td>A</td> <td></td> </tr> <tr> <td>A-</td> <td>80.00 - 84.99</td> <td>A-</td> <td></td> </tr> <tr> <td>B+</td> <td>76.00 - 79.99</td> <td>B+</td> <td></td> </tr> <tr> <td>B</td> <td>72.00 - 75.99</td> <td>B</td> <td></td> </tr> <tr> <td>B-</td> <td>68.00 - 71.99</td> <td>B-</td> <td></td> </tr> <tr> <td>C+</td> <td>64.00 - 67.99</td> <td>C+</td> <td></td> </tr> <tr> <td>C</td> <td>60.00 - 63.99</td> <td>C</td> <td></td> </tr> </tbody> </table>	GíakC	ScalC	US GíakC	NotCs	A+	90.00 - 100.00	A+		A	85.00 - 89.99	A		A-	80.00 - 84.99	A-		B+	76.00 - 79.99	B+		B	72.00 - 75.99	B		B-	68.00 - 71.99	B-		C+	64.00 - 67.99	C+		C	60.00 - 63.99	C	
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<b>Program Duration</b>	<i>14 weeks - 20 hours per week: 8 hours instructor-led and 12 hours lab.</i>																
<b>Homework Hours</b>	<i>Homework 8 hours per week total</i>																
<b>Delivery Method(s)</b>	<p><i>Indicate how the program is delivered.</i></p> <p><i>In-class &amp; Online (Live) instruction</i>  <i>Instructional methods may consist of but are not limited to engaging in interactive lectures; Instructor and student led oral, visual or digital presentations; lectures (Instructor and guests); demonstrations; workshops; seminars; videos/YouTube; the Internet for research and social media; independent and team assignments and project work; sharing information and working on team projects using in-class discussion groups or online forums; off-site tours (field trips); industry-led design challenges; critiques from Instructors, peers, self, industry professionals or Internet viewers; and quizzes and exams.</i></p>																

**3D Apparel Design & Integration Certificate Program**

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<p><b>Required course materials</b></p>	<p><i>**Textbook - <u>Garment Manufacturing Technology</u> - 1st Edition - ELSEVIER Publishing Access to Adobe CC (Illustrator, Photoshop, InDesign) Laptop Computer / iPad / Tablet with sufficient memory, mouse recommended. Students will be required to purchase illustration and presentation materials, fabrications and trims (advance notice given) for assignments and projects totaling approximately \$450</i></p>

**Program Organization\***

Title of Course/Work Experience Component *	# of Hours*
Materials Science	77
Progressive Pattern Making	77
Advanced Technical Apparel Product Development	63
Global Business Skills	63

This portion of the outline could use some more details in design. Based on the content to be covered in this course, I recommend including an overview of the developments created by Ruth and Ryan on this course.



**Gerber Pattern Making and Grading Program**

**Career Occupation\*  
(if applicable)**

*Technical Designer, Pattern Grader, Pattern Maker, Jr Pattern Maker, Gerber technician*

**Admission Requirements\***

- High School Diploma or equivalent, or mature student status (19+ on the first day of study)
- Admissions interview: In person or via Zoom/ Skype with the Director of Operations & Admissions or Dean of Studies
- Application Essay: The application essay must clearly describe why you have chosen the Cut Fashion Design Academy. Why did you choose this program. Why are you passionate about the fashion industry, and what are your future career goals in a minimum of 250 words.
- All applicants must be able to read, write, and communicate in the English language. See language proficiency requirements.

**Learning Objectives\***

**Upon completion of this program the successful student will have reliably demonstrated the ability to:**

- *Develop Models to industry standards.*
- *Create Pieces*
- *Understand and compose grade rule.*
- *Be able to Convert data.*
- *Create Cost Chart and Measure Chart*
- *Formulate Technical specification sheets.*
- *Learn how to use the plotter.*



**Gerber Pattern Making and Grading Program**

**Method(s) of Evaluation\***

*The course is broken up into small projects that ultimately come together to make a cohesive visual understanding of Gerber Pattern Making and Grading. The presentation format and style is determined by each student. Students will receive informal instructor feedback and written evaluations on a regular basis and at least once before 30% of the hours of instruction of the program have been provided.*

**Completion Requirements\***

*The Cut Academy will use the following grade scale to determine each student's grade through their work.*

*Students must receive an average of 75% on all the assignments in order to pass the course.*

Letter Grade	Scale (%)	Notes
<b>A+</b>	90.00 - 100.00	
<b>A</b>	85.00 - 89.99	
<b>A-</b>	80.00 - 84.99	
<b>B+</b>	76.00 - 79.99	
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<b>D</b>	50.00 - 54.99	
<b>I</b>	0.00 - 49.99	Temporary
<b>F</b>	0.00 - 49.99	Permanent

*In-Class + Homework Assignments X 9 total = 20%*

*Block + Grading Assignments X 9 total = 30%*

*Project 1 - Skirt - 5%*

*Project 2 - Lined Dress - 10%*

*Project 3 - Student Choice - 10%*

*Project 4 - Jacket - 10%*

*Replica book - 5%*

*Professionalism - 5%*

*Attendance - 5%*

**Program Organization\***

Title of Course/Work Experience Component *	# of Hours*
Gerber Pattern Making and Grading	280 Hours

Student Initials \_\_\_\_\_

## Gerber Pattern Making and Grading Program

Term: 14 weeks x 20/hrs = 280 hours

Weekly: Lecture 8 hrs/week. Lab 12 hrs/week

**COURSES****INTRODUCTION TO GERBER**

- Understand Gerber AccuMark sequence of operations.
- Learn Data Input – How pattern shapes are digitized and entered in the pattern making system.
- Work with Gerber menu items to develop, modify, check and finalize pattern pieces.
- Understand menu, sub-menus and functions to develop pattern making in the system.
- Understand data management, import/export and moving/deleting data.
- Create models to industry standards and run them through the AccuMark processes.

**CREATING, SAVING, DIGITIZING & BACKING UP**

- Create new pieces through the Create Piece Menu.
- Group existing pieces together and create a new Model File Editor in Pattern Design.
- Determine piece identifications for digitized pieces.
- Create a Grade Rule Table for digitizing purposes.
- Practice Digitizing a Closed Piece and a Mirrored Piece.
- Verify Digitized Data and view pieces in Pattern Design.
- Seam allowance and notches.
- Label a cut line for production.
- Be able to edit grade points.
- Creating offset line, shortening or lengthen an internal line, creating Drill hole.

**MANIPULATING BLOCKS**

- Create new pieces from drafting.
- Create pieces by using the trace function.
- Develop dart manipulation.
- Get to know all measuring tools.
- Rotate and flip pieces and line
- Create straight line, curve line, and flatten line segment.
- Assign rule table.
- Snap to Geometry
- Trace asymmetrical pieces.
- Grading map and rule table data
- Marking orders
- Calculate yield/ efficiency/ block facing/ bump line/ Split/combine marker/ Scale/ Shrinkage
- Remove grading.
- Learn how to resize, Mini marker, Export zip, convert data, costing chart and using a measurement chart.

**PRESENTATION**

- Students will create a final project of a digitized tailored jacket.
- Students will present their final presentation to peers and the course instructor.





**Gerber Pattern Making and Grading Program**

**MATERIALS:**

**\$450.00**

- Drawing Pencil Set
- Pencil Sharpener
- Vinyl Eraser
- Portfolio
- Software (Gerber Access)

**POTENTIAL GUEST SPEAKERS:**

There will be at least 1 guest speaker per semester

**BOOKS:**

Patternmaking and Grading Using Gerber's AccuMark Pattern Design Software Paperback – Jul 3 2014 y *Michele Lininger*

**\$161.00 + TAX**

**RECOMMENDED COMPUTER SPECS FOR GERBER:**

Processor Speed	Intel® Core™ i7 2400 3.1 GHz or higher
System Type	64-bit OS
Hard Disk Capacity	230+ GB
Memory	16 GB
Service Packs	Current
Graphics Card	Open GL Compatible

**Student Name:**

\_\_\_\_\_

**Student Signature:**

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Student Initials \_\_\_\_\_