Course unit title:	**Computer Aided Flat Pattern Design II**				
Course unit code:	AFDI 213				
Type of course unit:	Elective				
Level of course unit:	Bachelor				
Year / Semester of study:					
Number of ECTS credits allocated :	6	Lectures p/w:	-	Labs p/w:	3
Instructor(s)	Doris Kailos				
Aim of the Course	**Aim of the course and core objectives are to :** 1. Build on the knowledge acquired in Computer Aided Flat Pattern Design I, enabling students to develop complex patterns and / or pattern modifications using PDS. 2. Introduce students to computer pattern grading, thus enabling them to create smaller and larger sizes from a base size pattern, which is the pattern input into the system. 3. Familiarize students to Marker Making program, enabling them to understand how pattern pieces are positioned in the best possible way to save fabric and then plotted out for cutting.				
Learning outcomes of the course unit:	1. Design and develop more complex patterns in PDS. 2. Understand and prepare patterns which are created, graded, saved and organized into storage areas using Accumark Explorer. 3. Prepare for industry computerized mark making layouts ready for cutting using Gerber Marker Maker.				
Prerequisites:	AFDI 212	Co-requisites:	None		
Course contents:	**1. Complex patterns in PDS:** During this course students will develop greater skills in PDS which will allow them to produce complex patterns and make certain modifications to patterns making this process suitable for made to measure garments. Students will have greater understanding of creating, saving and organizing their patterns in storage areas suitable for latter use. **2. Pattern Grading:** Once students have mastered the skill of digitizing their patterns students will be introduced to pattern grading. Grading using the X &Y quadrants, drafting in pieces in the correct layout for grading, grading methods, using the Rule Table Editor and using the functions of Edit Delta and Create Delta. **3. Using Gerber's Marker Maker:** Students will be introduced to the Marker Making Process. This will include positioning patterns in the correct way in order to save fabric; interpret a Model Editor for a marker,				

	the marker-making screen display, placing pieces in a marker, the Marker making Toolbox and Menu bar. This will enable the student to produce patterns ready for industry.
Recommended and/or required reading:	
References:	1. Espinoza – Alvarado, J, D. (2007) *Computer Aided Design Using Gerber Technology.* Fairchild Publishing: USA. 2. Beazley, A. & Bond, T. (2003) *Computer – Aided Pattern Design & Product Development.* Blackwell Publishing: Oxford. 3. Burk, S. (2006) *Fashion Computing Design Techniques & CAD*. Burke Publishing: UK. 4. Sharp, J. & Henchen Elsasser, V. (2007) *Introduction to Accumark, Pattern Design & PDM*. Fairchild Publishing: USA.
Planned learning activities and teaching methods:	Short lectures, accompanied with technical demonstrations in computer labs are delivered in all topics mentioned above. Printed learning guides are also provided to students for a better understanding of the course content. Students have the opportunity to apply and demonstrate their understanding with practical computer exercises provided in every lecture. Their skills and knowledge are continually assessed with small projects throughout the semester and a class test at the end of the semester.
Assessment methods and criteria:	Computer skills in Accumark Explorer gained though practical exercises. **40%** Development of industry patterns using PDS. **30%** Demonstration of knowledge of Marker Maker evident in class test. **30%**
Language of instruction:	English
Work placement(s):	No