Course Unit Descriptor

Study Programme: Garment engineering

Course Unit Title: Garment sewing technology

Course Unit Code: DAS116

Name of Lecturer(s): Assistant Professor Ineta Nemeša

Type and Level of Studies: Master Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Course Aims:

To know principles of thread stitching and stitch classification in accordance with ISO 4915 standard. To acquire the main stitch types used in garment manufacturing, their formation principles, qualities and application. To know classification of industrial sewing machines based on the stitch type they perform. To acquire the main types of industrial sewing machines, their general characteristics, stitch formation principles and application.

Learning Outcomes:

After finishing the study course the students are able to select correct stitch types and corresponding to them sewing equipment to manufacture different kind of garments from different kind of textile materials.

Syllabus:

Theory

Stitch classification in accordance with ISO 4915 standard. Stitches of all classes, their formation principles, qualities and application: classes 100, 200, 300, 400, 500 and 600. Classification of industrial sewing machines based on the stitch type. Sewing needles. Material feeding systems. Bed types of sewing machines. Lockstitch class 300 sewing machines, one and two thread chainstitch class 100 and 400 sewing machines, coverstitch class 400 sewing machines, overedge chainstitch class 500 sewing machines, coverstitch class 600 sewing machines, bar-tacking machines, buttonhole-sewing machines, button-sewing machines. Automated workstations.

Practice

Thread consumption calculations, sewing needle selection, selection of sewing equipment for manufacturing of different kind of garments

Required Reading:

1. J. Jones, G.K. Stylios. Joining textiles. Principles and applications. Woodhead publishing 2013.
2. R. Nayak., R. Padhye. Garment manufacturing technology. Elsevier ,2015.
3. R. Nayak., R. Padhye. Automation in garment manufacturing. Elsevier 2017.

Weekly Contact Hours: 4	**Lectures:** 2	**Practical work:** 2

Teaching Methods:

Lectures and students group work

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	**Final exam**	points
Active class participation	10	written exam	20
Test I and Test II	40	oral exam	30
Preliminary exam(s)			
Seminar(s)			