

KNOWLEDGE ALLIANCE
ICT IN TEXTILE AND CLOTHING HIGHER EDUCATION AND BUSINESS

Syllabus: FLAT KNITTING MACHINE PROGRAMMING FOR 3D KNITWEAR

Total: 20hours

Knitting techniques for 3D knitwear production. Applications of 3D knitting structure (6 hours)

The course starts with the knitting techniques used for 3D knitwear production: course shaping, wale shaping, tubular knitting, changing yarn materials or structural parameters, combination of stitches. Examples of 3D knitwear applications are presented.

Programing techniques for 3D Knitwear (4 hours)

In the topic various programming techniques and its application in the 3D products creation with one of the most popular software Karl Mayer Stoll (Germany) are presented: manual shaping and sizing; shape editors, modules, pattern software intuitive futures, auto-create software, multicolor 3D patterning.

Approaches for 3D patterns creation (4 hours)

The topic covers the modern approaches for 3D pattern creation. The aim is to summarize the steps in the programming process of 3D patterns by presenting examples.

Simulation of knitting process (6 hours)

Connectivity of the art drawing and the knitting process. Fabric view, stitch view and the benefits of it to the process of the knitting products programing. Short demonstration of Karl Mayer Stoll's "Knitelligence" process.