

(Textile Engineering Department)

Graduate

Course Title: **Mechanics of Textile Materials Formability in Clothing**

Lecturer: **Dr. Maryam Yousefzade**

Course Topics:

- Garment formability & comfort
- Handle and making-up performance of fabrics and garments
- Effect of fiber, yarn, and fabric properties and finishing
- Fabric structure modeling
- Fabric structure modeling and fabric mechanic
- Extensibility of fabrics and seams, related defects in clothing
- Bending properties
- Shear properties
- Drape and 3D formability
- Fabric complex deformation analysis in garment
- Bagging of fabric and garments
- Compression properties
- Friction and surface behavior of fabrics
- Durability of fabrics and garments
- Sewing threads and its performance in garment appearance

Reading Resources:

- Engineering apparel fabrics and garments (2009)
- Structure and mechanics of textile fiber assemblies (2019)
- Structure and Mechanics of Woven Fabrics (2004)
- Effect of mechanical and physical properties on fabric hand (2005)
- Woven textile structure (2010)