

**NIRMA UNIVERSITY**  
**INDUSTRIAL DESIGN PROGRAMME**  
**Bachelor of Design, Department of Design**  
**Year IV, Semester VII**

L	T	P	C
2		9	8

<b>Course Code</b>	<b>IDPR 412 E</b>
<b>Course Title</b>	<b>Design of Institutional / Occupational Furniture</b>

**Course Learning Outcomes (CLO):**

At the end of the course the students will:

1. Design and develop a full scale prototype of Institutional Furniture
2. Identify and select materials from a manufacturing / fabrication perspective
3. Assess ergonomic implications
4. Understand the specific need for institutional / occupational furniture

**Syllabus:**

**Total Teaching hours: 165**

**Unit 1: Mapping the context**

**Teaching hours: 42**

Understanding criteria such as time, space, environment, materials and user to identifying design situation and appropriateness of the requirements and drawing a conclusion, leading to contextual understanding for the needs for a furniture.

- 1.1 User study using qualitative research tools
- 1.2 Mapping system needs
- 1.3 Mapping constraints
- 1.4 Human factors implications

**Unit 2: Material manipulation**

**Teaching hours: 60**

Applying knowledge gathered from the research and conceptualizing the design. followed by developing a detailed product solution, leading to creating the appropriate furniture.

- 2.1 Understanding suitability of materials
- 2.2 Creative conceptualization
- 2.3 Details for manufacturing
- 2.4 Assembly and disassembly

**Unit 3: Installation, erection & commissioning:**

**Teaching hours: 63**

Creating a full scale model considering the manufacturing processes, time and cost implications of the design and focusing on the real life application of installing the furniture by suggesting the viability/feasibility of the solution.

- 3.1 Prototyping
- 3.2 Installation
- 3.3 Costing

### **Suggested Readings:**

1. *Zelnik, Martin. Human Dimension and Interior Space: a Source Book of Design Reference Standards. Watson Guptil, 2001.*
2. *Lawson, S. (Ed.). (2013). Furniture design: an introduction to development, materials and manufacturing. Laurence King Publishing.*
3. *Herring, E. (2016). Street Furniture Design: Contesting Modernism in Post-War Britain. Bloomsbury Publishing.*

w.e.f. Academic year \_2020 and onwards

Key: L= Lecture, T= Tutorial, P= Practical, C= Credit