

**NIRMA UNIVERSITY
INDUSTRIAL DESIGN PROGRAMME**

**Bachelor of Design, Department of Design
Year III, Semester V**

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Course Code	IDSK 311
Course Title	Materials & Processes III (Surface Finishes)

Course Learning Outcomes (CLO):

At the end of the course the student will

1. Develop different kinds of finishes on specified materials, within current environmental and other regulatory practices
2. Identify advanced finishes used to enhance physical and functional characteristics of materials
3. Understand and classify properties of various materials and the need to create finishes on them

Syllabus:

Teaching hours: 60

UNIT 1: Introduction to Materials and Finishes

Teaching hours: 20

- 1.1 Introduction of to different kinds of materials and their properties
- 1.2 Industrial and non-industrial processes for different materials and finishing techniques
- 1.3 Industry Visits

UNIT 2: Material Finishes

Teaching hours: 20

- 2.1 Types of surface quality finishes and enhancement available

2.2 Finishing of surfaces and finishing contours of products with various physical tools and processes

2.3 Finishes and their attributes

2.4 Environmental and regulatory considerations

UNIT 3: Workshop Assignment

Teaching hours: 20

3.1 Select an attribute and function; develop design solutions

3.2 Make samples

Suggested Readings:

1. *Model Making: Materials & Methods* by David Neat, Publisher: The Crowood Press Ltd., 2008
2. *Plastics: Surface and Finish* by W. Simpson, Publisher: Royal Society of Chemistry, 1995
3. *The Surface Texture Bible: More Than 800 Color and Texture Samples for Every Surface*, Cat Martin, Publisher: Harry N. Abrams; Spl. edition, 2005