NIRMA UNIVERSITY
INDUSTRIAL DESIGN PROGRAMME
Bachelor of Design, Department of Design
Year III, Semester VI

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Course Code	**IDSK 322**
Course Title	**Elements of Form and Space III (Unconventional Materials)**

Course Learning Outcomes (CLO):

At the end of the course the students will:

1. Innovate forms with new materials that are not part of the commercial and conventional practice
2. Develop forms using natural fibers, regenerated materials, using various making processes such as bonding, interlacing, molding, shaping etc.
3. Experiment with materials to repurpose them in combination with other materials.
4. Examine conventional materials forming and shaping qualities, hitherto unexplored

Syllabus: **Total Teaching hours**: **82.5**

Unit 1: Exploring a select material: **Teaching hours: 20**

Understanding a material*, its inherent nature and qualities and making it function differently by:

1.1 Working directly with the material - bending, breaking, bonding
1.2 Exploring texture, mass, shape, strength etc.
1.3 Developing an understanding that is beyond visual observation alone

*The material selected may be a product/scrap that has already served its purpose

Unit 2: Ideating with the selected material using Metaphors: **Teaching hours: 20**

2.1 Building new attributes in the material, with attributing performance or qualities to be derived from them with the use of metaphors
2.2 Experimenting with re-engineering the material with techniques and processes to achieve the selected attribute

Unit 3: Making forms with the regenerated materials: **Teaching hours: 20**

3.1 Exploring making of forms with the regenerated materials where the attribute is enhanced further

Unit 4: Final Sample/ Prototype Development **Teaching hours: 22.5**

4.1 To make a finished prototype
4.2 To make a family of products or Product applications

Suggested Readings:

1 *Materials and Design: The Art and Science of Material Selection in Product Design*, Authors: Michael F. Ashby, Kara Johnson, Publisher: Butterworth-Heinemann, 2014
2 *Materials for Design,* Authors: Victoria Ballard Bell, Patrick Rand, Publisher: Princeton Architectural, 2006
3 *The Materials Sourcebook for Design Professionals,* Author: Rob Thompson, Publisher: Thames & Hudson, 2017

w.e.f. Academic year _2019 and onwards
Key: L= Lecture, T= Tutorial, P= Practical, C= Credit