

<b>Design Theory - Materials</b>	
<b>Code</b>	BADO-1-1-08
<b>Prerequisites</b>	None
<b>Number of credits</b>	4 semester credits / 6 quarter units
<b>Assessment weighting</b>	100% continuous assessment
<b>Module duration</b>	Semester III – 3 hours/week
<b>Element</b>	Design, Technology
<b>Supports stage learning outcomes</b>	<ul style="list-style-type: none"> <li>Integrate conceptual, contextual, ethical and material considerations in the <b>design</b> and realisation of space and form.</li> <li>Demonstrate and apply knowledge of <b>structural, technological and constructional principles</b>, the properties and meanings of materials and their influence on design decisions.</li> </ul>

<b>Module aims</b>	<p>The primary aim of the module is to:</p> <ul style="list-style-type: none"> <li>Enable students understand the properties, principles and source of materials and to apply this knowledge to the design situation.</li> </ul> <p>The secondary aim is to:</p> <ul style="list-style-type: none"> <li>Support the course and stage learning outcomes specifically with reference to Design (Project Work), Technology and Drawing.</li> </ul>
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<p><b>Module learning outcomes</b></p> <p>On completion of this subject students will be able to:</p> <ul style="list-style-type: none"> <li>Identify a large range of materials- their suitability, properties, quality &amp; visual impact</li> <li>Source, specify and cost appropriate materials for projects</li> <li>Apply with confidence selected appropriate materials for a particular function in interiors</li> <li>Recognise, and work within, fire ratings and regulations</li> <li>Be aware of environmental impact of chosen materials</li> </ul>
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<p><b>Syllabus:</b></p> <p><b>Introduction to materials and products</b> General introduction to materials; natural, man-made; impact on the environment</p> <p><b>Natural materials</b></p>
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Stone, marble, slate, wood.

**Processed materials**

Bricks / Tiles: tiles, terrazzo, ceramics, mosaics, concrete, re-constructed stone

Panelling : plywood panels, metal, M.D.F. plasterboard

Plastics : injection moulding, glass reinforced plastic, plastic laminates

Glass : float, reinforced, plate, stained

**Material specifications**

Specifications of different materials, sourcing.

**Finishes**

Walls: decorating papers, paints and plasters

Floors: hard/ soft woods linoleum, vinyl, rubber carpets: Axminster, Wilton, tufted, rugs-mass-produced, hand knotted, gun tufted

**Building Regulations**

Fire ratings of domestic materials

**Teaching/learning methodology:**

The teaching methodology is drawn from the overall aims and objectives. The subject is taught primarily by means of lectures, demonstrations, showroom visits and workshops. Materials and products are introduced in several ways including physical samples. Each lecture or demonstration is complemented by practical drawing workshops, guest lectures and appropriate visits. Assignments are an integral part of the teaching methodology. Students will be expected to maintain very regular contact with their assignment supervisor. The responsibility to arrange one-to-one tutorials rests with the student.

**Method of assessment:**

This methodology is also based on the module learning outcomes. The module is assessed by continuous assessment. The formative assessments will consist of assignment work based on research into and specification of materials. These will be also related to the project work module – Project Work III.

The summative assignment is conducted by means of portfolio/process-portfolio appraisal.

**Recommended reading**

House Book	Terence Conran	Conran Octopus	1996
The Natural House Book	Terence Conran	Conran Octopus	1989
Materials for Architects and Builders	Arthur Lyons	Arnold	1997

**Supplementary reading**

Technical Guidance Document B	D.O.E.	Government Publications Office	1997
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<b>Supplementary Reading</b>
<b>Periodicals</b>
Elle Decoration
Material
Irish Building
Wallpaper