<h1 class="pageTitle">CVEN20080 Construction Materials</h1>
<h2>Academic Year 2019/2020</h2>

This course will cover the manufacture and performance of key structural materials such as concrete, timber and steel.
Concrete topics covered include cement manufacture, aggregates, water, admixtures, concrete production, rheology, compliance and durability, self-compacting concrete, site practice.
For timber we will cover timber classification, its nature, moisture content and density, shrinkage and swelling, strength grading, durability and preservation, timber and wood-based products, behaviour in fire.
For metals we will study the use of metals in civil & structural engineering applications, structure of metals, deformation of metals, strengthening mechanisms, behaviour under working conditions.
Students will present their understanding of these materials through assignments and project work.

Curricular information is subject to change

What will I learn?

Learning Outcomes:
Upon completion of this module the students should:
1. Understand the key requirements and performance criteria that a construction material must satisfy.
2. Appreciate the properties of various construction materials and how these impact on their use in service.
3. Apply this knowledge through a series of assignments.

How will I learn?

Student Effort Hours:

Student Effort Type	**Hours**
Lectures	24
Small Group	24
Autonomous Student Learning	60
Total	**108**

Am I eligible to take this module?

Requirements, Exclusions and Recommendations

Not applicable to this module.

Module Requisites and Incompatibles

Not applicable to this module.

How will I be assessed?

Assessment Strategy

Description	Timing	Open Book Exam	Component Scale	Must Pass Component	% of Final Grade
Essay: Concrete assignment	Week 5	n/a	Standard conversion grade scale 40%	No	20
Examination: Timber - class exam	Week 9	No	Standard conversion grade scale 40%	No	20
Portfolio: Lab assignment	Coursework (End of Trimester)	n/a	Standard conversion grade scale 40%	No	40
Examination: Metals - class exam	Week 12	No	Standard conversion grade scale 40%	No	20

Carry forward of passed components
Yes

What happens if I fail?

Resit In	Terminal Exam
Spring	Yes - 2 Hour

Assessment feedback

Feedback Strategy/Strategies
* Group/class feedback, post-assessment
* Peer review activities
* Self-assessment activities

How will my Feedback be Delivered?
Not yet recorded.

Reading List

Construction Materials by Marious Soutsos and Peter Domone

Associated Staff

Name	Role
Dr Atteyeh S. Natanzi	Lecturer / Co-Lecturer

<nav class="white-box no-left-arrow zero-top-margin">
<h1 class="printOnly"><img src="https://www.ucd.ie/t4cms/ucdcollegesandschools_logo.png"> UCD Course Search
Construction Materials (CVEN20080) </h1><h3 class="printOnly">Academic Year 2019/2020</h3> The information contained in this document is, to the best of our knowledge, true and accurate at the time of publication, and is solely for informational purposes. University College Dublin accepts no liability for any loss or damage howsoever arising as a result of use or reliance on this information.
<h4 class="noPrint">Construction Materials (CVEN20080)</h4>
<dl>
<dt>Subject:</dt>
<dd>Civil Engineering</dd>
<dt>College:</dt>
<dd>Engineering & Architecture</dd>
<dt>School:</dt>

<dd>Civil Engineering</dd>
<dt>Level:</dt>
<dd>2 (Intermediate)</dd>
<dt>Credits:</dt>
<dd>5.0</dd>

<dt>Trimester:</dt>
<dd>Autumn</dd>
<dt>Module Coordinator:</dt>
<dd>Assoc Professor Ciaran McNally</dd>
<dt>Mode of Delivery:</dt>
<dd>Face-to-Face</dd>
<dt>Internship Module:</dt><dd>No</dd>

<dt>How will I be graded?</dt>
<dd>Letter grades </dd>

</dl>
<button class="menubutton" onclick="window.print()"><i class="fa fa-print fa-fw"> Print Page</button>
(Google Chrome is recommended when printing this page)

</nav>