



## NAAB International Certification

### Appendix 1: Template for Course Descriptions [limit 1 page per course]

#### Number & Title of Course (total credits awarded):

TECH112 - Building Materials - Semester 2 - ECTS 6 - Cicle/Profile: 1st. Cycle/Core - Scientific Area: TAUD- Technologies of Architecture, Urbanism and Design

#### Course Description (limit 25 words)

Knowledge of building materials, physical, chemical, pathological, and environmental characteristics. Understanding the functions they can perform in construction and how they integrate into design.

#### Course Goals & Objectives (list):

The role of construction materials in shaping the aesthetic and formal aspects of spaces and meeting required environmental conditions.  
Assessing the sustainability levels related with material choices and construction methods.  
Understanding the materials used to represent architectural ideas and define architectural objects, considering their visual representation and suitability in terms of functionality, environmental quality and form.

#### Student Performance Criterion addressed (list number and title):

Primary - B.4 Technical Documentation; B.8 Building Materials and Assemblies; Secondary - B.1 Pre-Design;

#### Topical Outline (include percentage of time in course spent in each subject area):

Lecturing 28 hours ( 18,6%)  
Studio work 28 hours ( 18,6%)  
Investigative work 95 hours (62,6%)  
Total workload 150 hours

#### Prerequisites:

It does not have; It does not have;

#### Textbooks/Learning Resources:

- Monografias de Materiais e Elementos de Construção □ Vítor Lopes dos Santos (Sebentas policopiadas) □ Files in digital format provided by to the student.
- Manfred Hegger, Volker Auch-Schwelk, Matthias Fuchs, Thorsten Rosenkranz, Construction Materials Manual, Detail, 2006.
- HORNBOSTEL, Caleb, Construction Materials, types, uses, and applications, John Wiley and Sons, USA, 1978.
- TEIXEIRA, Gabriela B., BELÉM, Margarida C., Diálogos de Edificação. Técnicas Tradicionais de Construção, CRAT Centro Regional de Artes Tradicionais, 1998.
- COSTA, F. Pereira da, Enciclopédia Prática da Construção Civil, Portugália Editora, Lisboa, 1955

#### Offered (semester and year):

1st Year - Fall;

#### Faculty assigned (list all faculty assigned during the two academic years prior to the visit):

Carlos Alexandre Coutinho Mesquita; Carlos Filipe Chambel Duarte; Carlos Manuel de Almeida Figueiredo; Maria João Bravo Lima Nunes Delgado; Vitor Manuel Vieira Lopes dos Santos; Carlos Alexandre Coutinho Mesquita; Carlos Filipe Chambel Duarte; João Cottinelli Telmo Pardo Monteiro; Maria João Bravo Lima Nunes Delgado; Vitor Manuel Vieira Lopes dos Santos;