



#### **NAAB International Certification**

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

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

TECH302 - Infrastructures, Systems and Regulations - Semester 6 - ECTS 6 - Cicle/Profile: 1st. Cycle/Core - Scientific Area: TAUD-Technologies of Architecture, Urbanism and Design

#### **Course Description (limit 25 words)**

Infrastructures as an integral part of a building and their functioning within the framework of codes and standards. Alternatives for each system and its adequacy.

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

The function of each system and its contribution to the overall functioning of the building.

Alternatives for each system and their adequacy.

Incorporate and coordinate infrastructure systems integration within the building.

Understanding infrastructure systems within a view of codes and standards.

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

Primary - B.3 Codes and Regulations; B.9 Building Service Systems; Secondary - B.4 Technical Documentation; B.8 Building Materials and Assemblies;

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

Lecturing - 28 hours Studio Work / Tutoring - 28 hours Design independent work - 112 hours

#### **Prerequisites:**

It does not have;

## **Textbooks/Learning Resources:**

Fred Hall, Roger Greeno (2017). Building Services Handbook, Routledge.

Walter T. Grondzik, Alison G. Kwok, (2015). Mechanical and Electrical Equipment for Buildings, 12th Edition, Wiley.

ASHRAE, (2018). Greenguide design, construction, and operation of sustainable buildings.

Ronald Hunter Howell, Kevin L. Amende (2021). Principles of Heating, Ventilating and Air Conditioning.

Donald Watson, (2004). Time Saver Standards for Architectural Design 8 ed. Mc-Graw Hill

## Offered (semester and year):

3nd Year - Spring;

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

Carlos Filipe Chambel Duarte; Luísa Maria da Conceição dos Reis Paulo; Paulo Manuel dos Santos Pereira de Almeida;