# Istituto di Istruzione Superiore "D. Scano- O. Baccaredda" - Cagliari Anno Scolastico 2024-2025

### Programma di Lingua Inglese

# Prof.ssa Marongiu Annalisa

#### **CLASSE 5° A CAT CAGLIARI**

Dal testo "Building Horizons" di Cinzia Medaglia e Martin Seiffarth, Casa Editrice Loescher.

## **MODULE 4: BUILDING ELEMENTS**

<u>Foundations:</u> Shallow and deep foundations – Aspects to take into consideration: Scour, Frost heave.

<u>Walls:</u> Main types of walls: load bearing, non-load bearing – Inside the wall – Insulation of walls.

**Floor:** Parts of a floor – Materials used

<u>Stairs:</u> Types of stairs: Spiral, Straight, Circular, Return, "L" Stairs – Materials used – Parts of a stair

**Roofs**: Purpose – Types of roofs – Roof materials

<u>Barrier removal:</u> The most common barriers in buildings – Possible solutions to remove barriers

## **MODULE 7: PUBLIC WORKS**

**Roads**. Roads in the past and the birth of modern roads – Constructing a road

**Tunnels:** Functions – Types of tunnels – Building a tunnel – "Green Tunnels"

<u>Bridges:</u> Function – Types of bridges - Types of bridges: Beam, Cantilever, Arch, Suspension, Movable, Double-Decker

The Golden Gate Bridge: design and main structural characteristics

Power point of a bridge chosen by the student.

#### **MODULE 8: ON THE BUILDING SITE**

<u>Health and safety</u>: Causes of accidents - Possible solutions - The PPE - Safety measures in Work platforms and scaffolds

Safety Signs: Prohibitory, Mandatory and Warning signs

Safety legislation in Italy and the UK

Safety in Italy: Decree 81/2008: Key points - RSPP and RLS - The DVR

<u>Safety in the United Kingdom</u>: CDM 2015 – Formal requirements – Additional requirements

#### HISTORY OF ARCHITECTURE

American Modernism

Frank Lloyd Wright: Life and work, The organic architecture

Frank Lloyd Wright: The Prairie School – The Usonian Style – Goetsch Winckler House

- The Fallingwater House

Antoni Gaudì: Life and work – Casa Batllò - The Sagrada Familia

Renzo Piano: Life and work, The Pompidou Centre