

## SYLLABUS DEL CORSO

### **Introduction to quantum computing and quantum algorithms**

2324-113R-02

---

#### **Obiettivi**

Understanding Quantum Computing Fundamentals: Provide students with a foundational understanding of the principles and concepts that underpin quantum computing, including qubits, superposition, entanglement, and quantum gates.

Exploring Quantum Algorithms: Introduce students to various quantum algorithms such as Grover's algorithm, Shor's algorithm, and quantum simulation algorithms. Students learn how these algorithms differ from classical algorithms and their potential applications.

#### **Contenuti sintetici**

#### **Programma esteso**

#### **Prerequisiti**

#### **Modalità didattica**

#### **Materiale didattico**

#### **Periodo di erogazione dell'insegnamento**

**Modalità di verifica del profitto e valutazione**

**Orario di ricevimento**

**Sustainable Development Goals**

---