

## Welcome!

Benvenuto | Welcoming

## **SALONE DELL'ORIENTAMENTO** 12-13 aprile 2024

ARCHITECTURE



Politecnico di Torino



## Structure of the program – Bachelor in Architecture





## First year subjects

SUBJECTS	Calculus	History of contemporary architecture	Architectural drawing and survey Lab	Morphological and structural concepts	Architecture Design Studio	Architectural technology – Culture and fundamentals	Urban Planning	English language
ECTS	8	6	12	8	6	8	8	3
Semester	I	I	1-11	1-11	II	II	II	II





Program assuming the most updated professional requirements

International program: fully in English with a wide range of mobility opportunities

Freedom in personalizing the study program

Great positioning in QS ranking by subject in 2024 : 2nd place in Italy, 21st in the world (QS ranking by subject)

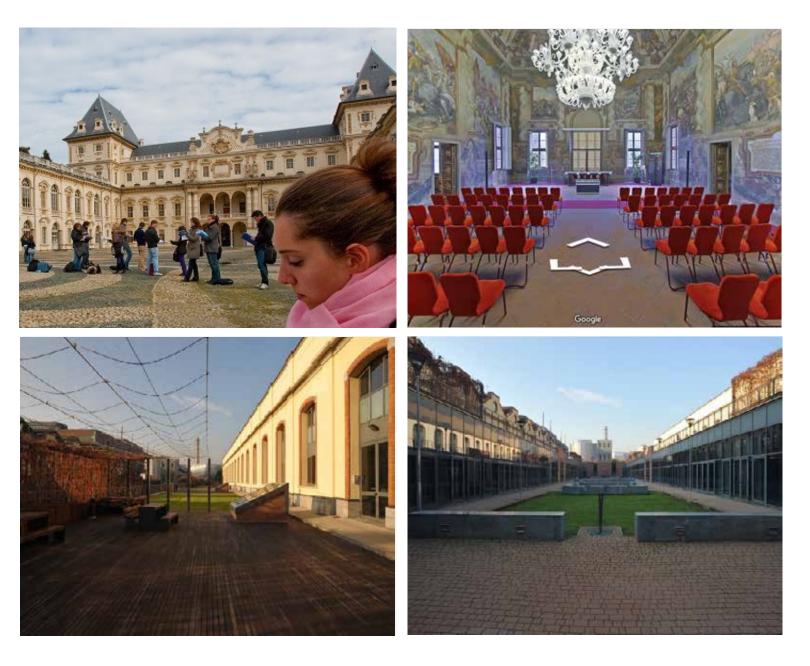
Strong feeling of belonging to a prestigious school of architecture



## The Valentino Castle

https://castellodelvalentino.polito.it







## Politecnico through the world







# Architectural program communication

## TeleArchitettura

## Architecture program video



www.instagram.com/telearchitettura

Cerca Su YouTube – PoliTo
Teaching-Collegio di Architettura





How can I access to Architecture Bachelor? Entrance Test TIL-A

a.a. 2024/2025

Positions available: **500 places 85 places for NON UE students +** 415 For EU students **(ONLY up to 40 of EU students can register for the english taught curricula** 

Test in presence, 23rd of July 2024 for EU students,

online, 25th of July 2024 ONLY for NON EU students, residents abroad requiring VISA

Test can be taken in italian or in english as a free choice

Entrance test is organized and managed from Politecnico di Torino according to the ministerial regulamentations .

2022/2023 1686 applicants

2023/2024 > 2000 applicants



How can I access to Architecture Bachelor?

Entrance Test TIL-A

**Test Organization** 

## **Duration**

## **100 minutes**

**50** 

## **Questions:**

Multiple choice test. For each question 5 answers are available. Only one answer is correct.

## **Punteggio:**

Correct answer	+1	points
Wrong answer	-0,25	points
No answer	0	points

Ranking: no minum score is required, if all the places are assigned, no further test will be held



How can I access to Architecture Bachelor?

Entrance Test TIL-A

**Test Organization** 

**Duration** 

**Questions:** 

**5 tematic sections** 

10 questions in each section

20 minutes to complete every section

100 minutes

50

Reading comprehension 10 questions /20 minutes

History and general knowledge 10 questions /20 minutes

**Logic** 10 questions /20 minutes

**Drawing** 10 questions /20 minutes

Maths and Physics 10 questions /20 minutes



Questions focus on 2 texts (scientific essays, articles or literature text) by classical or contemporary authors.

For each text you will have to answer 5 questions with 5 possible answers each (only 1 correct amswer for each question)

#### Passage 1



Read the passage and answer the related questions on the basis of its contents and not of any knowledge you might have of its subject.

At the end of 1504, Raphael, seeking major public commissions, arrived in Florence at the home of the gonfalonier of the Republic, Pier Soderini, with a proper letter of recommendation. It had been written on the first of October by the sister of the Duke of Urbino, Guidobaldo da Montefeltro, Giovanna Feltria, the Duchess of Sora, widow of Giovanni Della Rovere, lord of Senigallia and prefect of Rome. Although Soderini could not avoid reading those lines carefully, Raphael was not granted the prestigious commissions that he had hoped for from the Florentine Republic. However, he had the opportunity to stay in Florence during one of the most fertile, intense and fascinating periods in the city's history. The undisputed protagonists of this fortuitous and lively season were Leonardo and Michelangelo who, like others, had returned to Florence in search of the coveted opportunities that Soderini appeared to dispense. Bearing the letter of Giovanna Feltria to the gonfalonier in Palazzo Vecchio, Raphael would certainly have stopped in Piazza della Signoria to admire Michelangelo's David, an emblem of Republican intelligence, placed on the "balustrade" in front of the palace a little earlier, on 8 September 1504. Once inside, someone would certainly have shown him the wall in the majestic Salone del Gran Consiglio where Leonardo and Michelangelo were soon expected to paint the frescos the "Battle of Anghiari" and the "Battle of Cascina", a vain hope, given that – as is well known – only the sketches of the two great projects were completed, which also influenced Raphael's education. Finally, some time later, someone may have accompanied the artist to see the "Universal Judgement", the fresco by Fra Bartolomeo and Mariotto Albertinelli in the monastery of San Marco, of which Fra Girolamo Savonarola had been prior.

(from: "Raphael", Elena Capretti, Giunti Editore).

### 11. According to the text, Raffaello Sanzio went to Florence to: (see Passage 1)

- A) obtain prestigious public commissions
- B) admire the works of Michelangelo and Leonardo
- C) meet Girolamo Savonarola
- D) deliver a letter of Pier Soderini
- E) accompany Giovanna Feltria, Duchess of Sora
- According to the content of the text, why was Raphael's stay in Florence so profitable? (see Passage 1)
  - A) Because Raphael was able to come into contact with the work of artists of great calibre such as Michelangelo and Leonardo
  - B) Because Raphael helped strengthen the political bond between the gonfalonier Soderini and the Duchy of Urbino
  - C) Because Raphael was able to admire the splendour of Palazzo Vecchio in order to deliver a letter
  - D) Because Raphael became acquainted with Fra Bartolomeo and Mariotto Albertinelli in the monastery of San Marco
  - E) Because Raphael, delivering a letter to Florence, was assured of the favour and political protection of the Duchy of Urbino

## **Reading comprehension**, 10 questions /20 minutes



## Reading comprehension, 10 questions /20 minutes

#### 13. According to the text, what was the symbol of Republican intelligence? (see Passage 1)

- A) The David
- B) The Battle of Anghiari
- C) The Battle of Cascina
- D) The Universal Judgement
- E) Leonardo

### 14. According to the text, Giovanna Feltria's letter: (see Passage 1)

- A) was of no help to Raffaello Sanzio, since he was not given an appointment
- B) was decisive for Raffaello Sanzio, since it enable him to personally get to know Leonardo and Michelangelo
- C) was of no help to Raffaello Sanzio, since Solderini read it without paying much attention
- D) was of no help to Raffaello Sanzio, since it was written by the Duchess, who had much less political power and influence that her brother Guidobaldo
- E) was decisive for Raffaello Sanzio because, while he delivered it, he was able to witness the creation of the fresco "The Battle of Anghiari"
- 15. According to the text, which of the following works was influential in Raphael's artistic formation? (see Passage 1)
  - A) The "Battle of Cascina"
  - B) The "Universal Judgement"
  - C) The David
  - D) Piazza della Signoria
  - E) The frescos in the Salone del Gran Consiglio



Short questions aimed at evaluating general knowledge from high school and from contemporary cultural debate such as:

• Correctly situate in time and space major historical events with international relevance, also referring to artistical context.

- Awarness of International political institutions and their roles.
- Understanding of economic and social phenomenon.

At least 2 of these questions are graphically formulated



## History and general knowledge,

10 questions /20 minutes

### 21. Identify the correct pairing.

- A) Ministry of Interior Palazzo del Viminale
- B) Presidency of the Republic Palazzo della Farnesina
- C) Chamber of Deputies Palazzo del Quirinale
- D) Senate of the Republic Palazzo Montecitorio
- E) Ministry of Foreign Affairs Palazzo Madama

### 22. The musical composition, used as the anthem of the European Union, was written by:

- A) Ludwig van Beethoven
- B) Wolfgang Amadeus Mozart
- C) Fryderyk Chopin
- D) Giuseppe Verdi
- E) Richard Strauss

#### 23. Who designed the Royal Palace of Caserta?

- A) Luigi Vanvitelli
- B) Ferdinando Fuga
- C) Alessandro Galilei
- D) Filippo Raguzzini
- E) Giuseppe Piermarini

#### 24. In which year took place the atomic bombardment of Hiroshima and Nagasaki?

- A) 1945
- B) 1940
- C) 1947
- D) 1943
- E) 1948

#### 25. Between June and November 1942, near the Egyptian town of El Alamein, British forces under the command of General Montgomery fought against:

- A) Italian and German forces under the command of Field Marshall E.J. Rommel
- B) Italian forces under the command of Benito Mussolini
- C) Russian forces under the command of Stalin
- D) French forces under the command of General Charles de Gaulle
- E) Spanish forces under the command of Francisco Franco



## History and general knowledge,

10 questions /20 minutes

#### 26. In which of the following time periods was the People's Republic of China established?

- A) 1945 1955
- B) 1956 1968
- C) 1915 1922
- D) 1923 1933
- E) 1934 1944
- 27. On 31<sup>st</sup> March 2016, an internationally renowned figure in architecture and design died who, in Italy, created a number of works such as the "MAXXI – National Museum of the Arts of the 21<sup>st</sup> Century" in Rome and the so-called "Crooked" skyscraper of Milan. Who was it?
  - A) Zaha Hadid
  - B) Massimiliano Fuksas
  - C) Frank O. Gehry
  - D) Denise Scott Brown
  - E) Kazuyo Sejima

#### 28. Which of the following historical events does NOT relate to the period of Italian unification?

- A) The signing of the Treaty of Campoformio
- B) The first war of independence
- C) The second war of independence
- D) The Expedition of the Thousand
- E) The Plombières Agreements

### 29. What is the name of the work in the figure and who is the artist?



- A) "Pietà Rondanini" by Michelangelo Buonarroti
- B) "Pietà Vaticana" by Michelangelo Buonarroti
- C) "Pietà" by Donatello
- D) "Pietà di Palestrina" by Michelangelo Buonarroti
- E) "Pietà" by Antonello Gagini



## Conoscenze acquisite negli studi, storia e cultura generale, 10 domande /20 minuti

Capisaldi dell'arte e dell'architettura antica e moderna, italiana ed europea-globale Tendenze e movimenti dell'arte contemporanea (1850-2000) nel dialogo tra gli artisti e i media, l'architettura, la politica.

globale e locale: quali specificità sono proprie di Torino come città moderna e contemporanea?

Le radici profonde dell'architettura occidentale: architetture e arti delle civiltà antiche del Mediterraneo

Quale consapevolezza avete delle civiltà architettoniche extraeuropee?

Il '900 come secolo della Modernità internazionale: dentro e fuori l'Europa

Grandi temi dell'architettura e della crescita urbana dalla Rivoluzione industriale al Novecento

Vocabolario tecnico, Termini che definiscono un ambito professionale

Il Rinascimento come fenomeno identitario per l'architettura e l'arte italiana

Almeno 2 QUESITI sono proposti graficamente



Logic, 10 questions /20 minutes

Questions aim at testing your ability in building a logic reasoning from given premises. Those premises are set in different ways and require different types of logic.



- 1. What was the discount percentage if an object that cost 235 euros is sold for 47 euros?
  - A) 80%
  - B) 160%
  - C) 188%
  - D) 94%
  - E) 120%
- 2. If:
  - all mathematicians are precise
  - Matteo is keen on cooking
  - everyone who is keen on cooking is precise

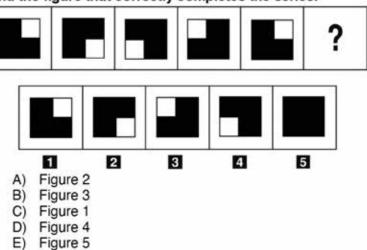
### Which of the following statement will certainly be true?

- A) Matteo is precise
- B) Anyone who is keen on cooking cannot be a mathematician
- C) Matteo is a mathematician
- D) All mathematicians are keen on cooking
- E) All precise people are keen on cooking
- 3. Correctly complete the following sequence, using the Italian alphabet:
  - R; 127; L; 140; D; 153; ?; ?
    - A) U; 166
    - B) V; 169
    - C) Z; 166
    - D) U; 160
    - E) U; 136
- 4. Which, among the terms given, correctly complete the following verbal proportion? Badminton : X = pasta twist : Y
  - A)X = sportY = pastaB)X = tennisY = potC)X = shuttlecockY = meat sauceD)X = athleteY = a strand of spaghettiE)X = ballY = kitchen

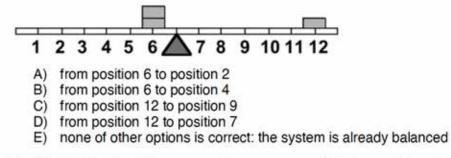
Logic, 10 questions /20 minutes



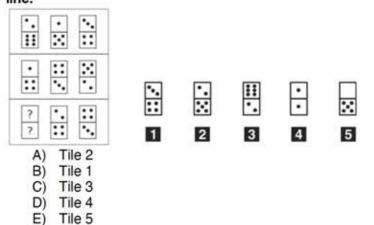
5. Find the figure that correctly completes the series.



6. In order to balance the system in the figure, it is necessary to move a token:



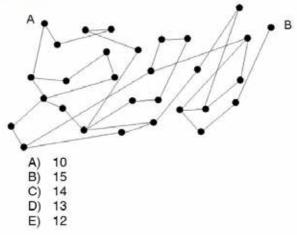
7. Identify the Domino tile, among those proposed, that completes the sequence in the third line.



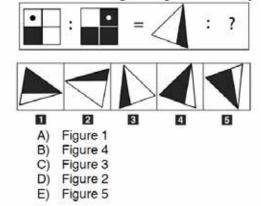
Logic, 10 questions /20 minutes



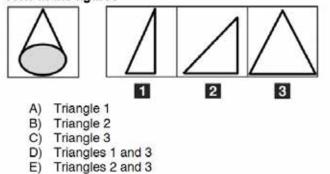
8. What is the minimum number of segments that must be covered to go from point A to point B?



9. Which one of the given figures correctly completes the proportion?



10. Which of the following triangles, revolving around one of its sides, could have created the cone in the figure?



**Logic**, 10 questions /20 minutes



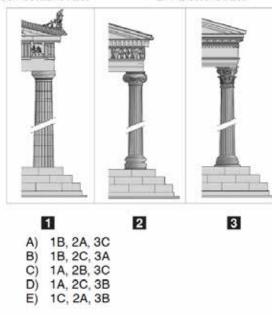
The questions aim at evaluation the ability in analyzing and interpreting graphics and iconic representations, or in recognizing corepondence between an object and its representation.

Basic knowledge on geometry and orthogonal projection is required.

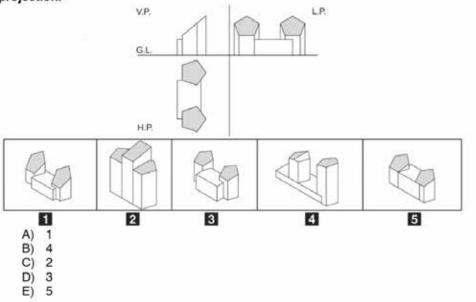
Not all the questions are graphically formulated.



40. Identify the option that gives the right combination between images and architectural orders. A – Ionic Order B – Doric Order C – Corinthian Order



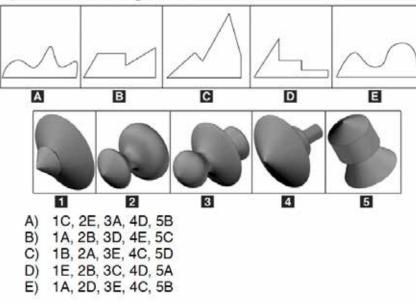
41. Given the drawing in orthogonal projection, identify the corresponding axonometric projection.



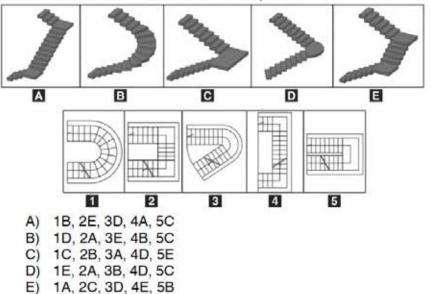
**Drawing**, 10 questions /20 minutes



42. Establish the correct correspondence with the solids of revolution and the planes represented in the figure.



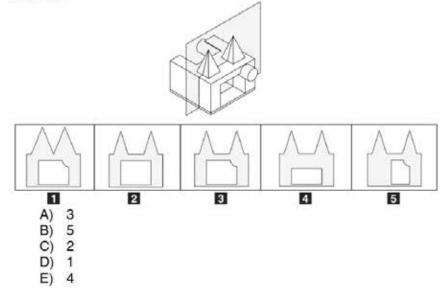
43. Match the correct 3D model with each plan.



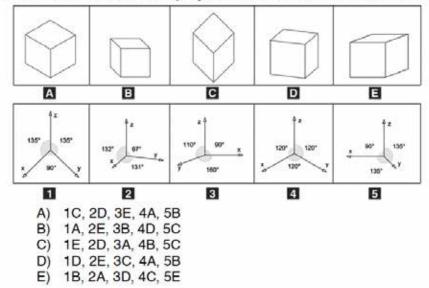
**Drawing**, 10 questions /20 minutes

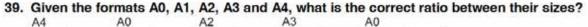


44. Referring to the plane that divides up the solids represented, which is the correct section?

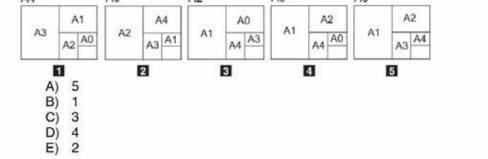


45. Match each axonometric projection with the correct set of Cartesian axes.





A COLOR DISCENSIVE AND PROSTREMANDED



Drawing, 10 questions /20 minutes



Maths and Physics 10 questions /20 minutes, 6 questions for maths + 4 for physics

Some questions might be graphically formulated

 numerical sets and arithmetic calculation (natural, relative, rational, real numbers; ordering and comparing numbers; order of magnitude; operations, powers, radicals, logarithms), calculus algebraic, Euclidean geometry (polygons, circumference and circle, length measurements, surfaces and volumes, isometry, similarities and equivalences, geometric places), geometry analytics (fundamentals), probability and statistics (fundamentals), elements of trigonometry (fundamentals)

 elementary notions on the principles of Mechanics: definition of physical quantities fundamentals (displacement, velocity, acceleration, mass, momentum, force, weight, work and power); law of inertia, Newton's law and principle of action and reaction), Fundamentals of Statics

• elementary notions on the principles of thermodynamics (general concepts of temperature, heat, specific heat, dilation of bodies)

• elementary notions of Electrostatics and Electrodynamics: Coulomb's law, e field electric potential, capacitors, series and parallel capacitors, direct current, electrical resistance, Ohm's law, resistances in series and parallel



- 49. An aquarium contains 200 litres of water. Given the specific heat of the water is 4,186  $J/(kg \cdot K)$ , what is the quantity of energy required to increase the temperature by 1 degree?
  - A) 837,200 J
  - B) Around 600 kJ
  - C) 14,860 J
  - D) 328,400 J
  - E) It is not possible to answer without knowing the aquarium's volume
- 50. A barman has to lift a barrel of beer from the floor to the bar counter.

Given the barrel has a mass of 40 kg and the counter is 80 cm high, approximately what will be the work carried out by the barman?

- A) 320 J
- B) 32 kJ
- C) 640 J
- D) 512 N
- E) 64 J
- 51. A child with a mass of 20 kg moves at a speed of 18 km/h sat on a sledge with a mass of 5 kg. What is the total quantity of motion of the child-sledge combination?
  - A) 125 kg · m/s
  - B) 100 N
  - C) 450 kg · m/s
  - D) 450 N
  - E) 360 kg · m/s

52. A force of 30 N is applied to a mass of 50 decagrams. What is the acceleration of the mass?

- A) 60 m/s<sup>2</sup>
- B) 15 m/s<sup>2</sup>
- C) 0.6 m/s<sup>2</sup>
- D) 30 m/s<sup>2</sup>
- E) 7.5 m/s<sup>2</sup>

Maths and Physics 10 questions /20 minutes



- 53. An ohmic conductor with a resistance of 300 Ω is crossed by a current of 80 mA. What will be the voltage applied to the ends of the conductor?
  - A) 24 V
  - B) 24,000 V
  - C) 3,750 V
  - D) 3.75 V
  - E) 0.25 V
- 54. The blades of an helicopter are each 2 metres long and rotate 300 times a minute. Calculate the rotation period of the blades.
  - A) 0.2 s
  - B) 5 Hz
  - C) 0.5 s
  - D) 0.02 s
  - E) 2 s

#### 55. If the sine of an obtuse angle is equal to 4/5, its cosine is:

- A) -3/5
- B) 3/5
- C) -2/5
- D) -1/5
- E) 1/5

#### 56. The maximum value assumed by the function $y = -x^2 + 5x - 4$ is:

- A) 9/4
- B) +∞
- C) 4
- D) 1
- E) 5/2

#### 57. In the set of Real numbers, the equation $x^3 = 4x$ has:

- A) three distinct solutions
- B) three solutions, two of which coincide
- C) only one solution
- D) no solution
- E) two solutions

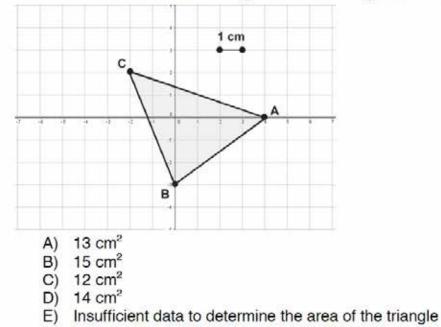
#### 58. The inequality (x + 3)/(1 - 2x) > 0 is satisfied by:

A) -3 < x < 1/2B) x < -1/2 or x > 3C) -1/2 < x < 3D) x < -3 or x > 1/2E) x > -3

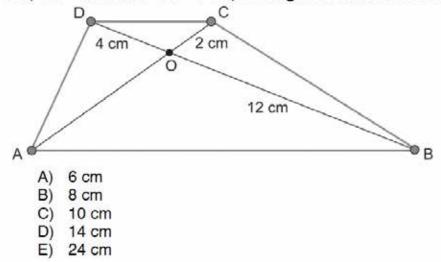
Maths and Physics 10 questions /20 minutes



59. What does the area of the triangle ABC in the figure measure?



60. If the diagonals of a trapezium ABCD intersect at point O, forming the segments OB = 12 cm, OC = 2 cm and OD = 4 cm, the segment OA will measure:



Maths and Physics 10 questions /20 minute