## ISTITUTO PLANCK

« BACK

## THE HEADMASTER

Technological and humanistic knowledge meet at the Max Planck Institute in Lancenigo. The training offers ranges from the Technical Technological Institute divided into various addresses to the most recent Scientific High School of Applied Sciences, which combines the laboratory vocation with the deepening of more theoretical disciplines.

The Institute, founded in 1983, has a long history linked to the development of the Veneto economy, especially Treviso. Through new fields of study and advanced teaching methodologies, over the years it has trained specialized technicians in response to the needs of companies: computer programmers and experts in telecommunications, electronics and automation for industry 4.0. The Applied Sciences High School benefits from the know-how of ITIS without giving up the solid humanistic and scientific background. Numerous collaborations with schools, industrial associations, training institutions and universities enrich the training offer.

The school is located within the Lancenigo di Villorba Campus, easily accessible by public transport (train and bus), and consists of several pavilions, some of which are used as laboratories and gyms, in addition to green spaces, a canteen and a parking.

There are currently 1322 students in 62 classes. The harmonious development of personality and professional success constitute the mission of the Institute.

The post-diploma Technical Superior specialization course for the Digitization of Industry 4.0 Production Processes was obtained within the ITS Academy of Mechatronics Veneto.

## **PROGRAM**

The educational path of the TECHNICAL TECHNOLOGICAL INSTITUTE is a 5-years course. In the first two years students acquire skills in the disciplines preparatory to the subsequent specialization. During the three-year period, the student is guided to choose, on the basis of their interests and skills, between 4 articulations: Electronics, Automation, Information Technology and Telecommunications. Electronics and Automation deepen the principles and technologies of all electrical systems, aimed both at the generation, transmission and processing of analog and digital signals and at the creation of automatic systems. Graduates in these addresses are able to work on the development and use data acquisition systems, devices, circuits, appliances and electronic apparatuses; use of control and interface techniques based on dedicated software; industrial automation and control of production processes; maintenance of workplace safety and environmental protection.

IT and Telecommunications aim to acquire skills related to software products and telecommunications infrastructures, in terms of conception, design, production and marketing. In particular, the Computer Science graduate can carry out tasks of managing the information system of companies, security auditors, hardware technicians, experts in network security and management. The telecommunications graduate, on the other hand, specializes in technical support for users of telecommunications equipment, in the design and operation of TLC networks, in the role of communication manager.

In general, the student is required to be curious about technological progress and a propensity to combine logical reasoning with skills in physics and mathematics.

The SCIENTIFIC HIGH SCHOOL - APPLIED SCIENCES develops over 5 years, at the end of which students can access all university faculties or higher education. The fifth year, however, also provides for a link between school and job placement. The preparation acquired in this High School guides you to deepen and develop knowledge, skills and competences that can be used in the development of scientific and technological research, favoring laboratory teaching. The path enhances the scientific-technological side through the hourly

increase in Natural Sciences and the introduction of IT as a subject in itself. It provides the student with advanced skills in mathematical, physical, chemical, biological, Earth sciences, and in the application of computer science to them.

The presence within the Max Planck Institute of different fields of study allows enrolled students to evaluate more carefully the validity of the choice made at the end of middle school to confirm it with greater awareness or to modify it while remaining within the technical field -scientific. In particular, at the end of the first two years it is possible to move from High School to technical and vice versa, as well as to decide, within the technical course, between the different branches.

The Pathways for Transversal Skills and Orientation are carried out in collaboration with companies and economic and socio-cultural bodies, public and private, in the area and with universities.

## **INSTITUTE ACTIVITIES**

There are numerous optional activities. In the technical-scientific field, students can participate in external competitions and competitions on a regional, national and European basis: Olympics in mathematics, physics, science (EUSO), chemistry, computer science; robotics competitions (LEGO LEAGUE). Furthermore, an AutoCAD course is proposed, in order to guarantee a basic knowledge for computer design.

As part of language enhancement, supplementary lessons are provided during curricular time with mother tongue teachers and extracurricular enhancement courses divided by skill levels with related certificates (B1, B2, C1): since 2015 the school has been a Trinity certification center. Then there are the study holidays abroad.

For the humanistic enhancement are organized creative reading and writing activities, such as the literary Certamen, the "Veneto Legge", meetings with contemporary authors, the Giornalino d'Istituto. Various other projects are aimed at the culture of safety and legality also in the IT environment, and at the prevention of risky behaviors. The Institute has activated the Listening Space since 1994 for interventions against youth discomfort and to support study.

Finally, the school library organizes conferences, in-depth courses, exhibitions.

