



OLIMPIÁDA DO
CONHECIMENTO
SENAI SESI

D

THE FUTURE

PARTICIPANT'S GUIDE
USEFUL INFORMATION



INTRODUCTION

This is the seventh edition of Knowledge Olympics, the biggest competition of Professional Education of the Americas. Simultaneously with the Olympics will be held for the first time in the American continent Worldskills Americas.

Eight hundred and seventy students from SENAI and Senac throughout Brazil and more than 20 countries of the Americas will hold events in 50 industrial occupations and 04 occupations of commercial services. Besides these two major competitions will be held SESI Robotics Tournament and Confectionery Tournament and several simultaneous events. SENAI expected to make the event more than a competition, an opportunity for integration and growth.

In this guide, you will find all the information about the operation of the Olympics and also guidance on lodging, food, transportation, scheduling, among other useful tips.



WELCOME

Dear Participant,

It is with particular joy that I welcome the national and international competitors, team leaders, specialists, technical supervisors and other participants of the Knowledge Olympics and WorldSkills Americas 2012.

The Olympics hosts several competitions and help in developing skills that are fundamental for the development of the Brazilian industry, and also allows each student-competitor perfects skills that ensure it a bright professional future.

This competition creates an opportunity and a unique environment to be properly appreciated and valued the importance of vocational education and the beauty of the mission of SENAI and Senac.

It's basically an event consisting of young people, who, with their energy, hope and perseverance inspire us to always strive for a better future.

All are welcome to this celebration of vocational education and good competition at all.

Rafael Lucchesi

General Director of SENAI

Sidney Cunha

General Director of SENAC

ABOUT SÃO PAULO

São Paulo is one of the 27 Federative Units in Brazil, occupying an area of approximately 248,196.960 km², according to IBGE data. Located in the Southeast region of Brazil, and houses the major financial, industrial and dissemination of information and research centers in the country.

Its capital, the city of São Paulo, is known worldwide because exerts significant influence national and internationally, from cultural, economic or political point of view. São Paulo concentrates curiosities, such as many of the tallest buildings in Brazil and its population approaching 11 million inhabitants, making it one of the most populated cities on the planet.

São Paulo stands out more as a city marked by businesses tourism than by recreational tourism. Large hotel chains, whose target audience is the corporate, are installed in the city and have branches in several of its centrality. The entire infrastructure for city events causes makes it host major fairs in the country.

Cultural tourism also has relevance, especially when taking into consideration the various international events that occur in the metropolis, such as: International Art Biennial, the Brazil Grand Prix Formula 1, São Paulo Fashion Week and São Paulo Indy 300. There are many cinemas, theaters, museums, parks and cultural centers - such as the Latin American Memorial, the Museum of the Portuguese Language, the Ipiranga Museum, São Paulo Art Museum (Masp), the Ibirapuera Park, the Botanical Garden of São Paulo and Paulista Avenue.

The diversity of peoples and cultures that built the city also makes the rich gastronomy of the region is in itself a major tourist attraction. This statement can be proven through the wide gastronomic variety of the city, which covers several types of cuisine.

KNOWLEDGE OLYMPICS AND WORLDSKILLS AMÉRICAS

What is?

The Knowledge Olympics is a competition of vocational education that has as main objective to evaluate technical and practical skills of the participating students, considering aspects such as creativity, leadership, decision making, problem solving, self-development, as skills communication and critical thinking, considered essential for a competent professional profile.

Along with the Knowledge Olympics will be held for the second time in the American continent, the WorldSkills Americas, a competition that brings together students from vocational education throughout the Americas. In São Paulo, about 216 competitors will represent more than 20 countries in the tournament.

Who is involved?

Competitors students of all SENAI schools throughout Brazil, Senac and more than 20 countries in the American continent.

How it works?

To participate in the Knowledge Olympics, students of SENAI and Senac across the country must overcome the challenges of school stage. Then the winners of each occupation compete at the state level and the best are qualified for the national stage. This phase terminating the proceeding concerning SENAI, brings together the best students by occupation, which may represent Brazil in the next year, in the WorldSkills International,

WorldSkills International

The tournament is promoted by the International Vocational Training Organization (IVTO), worldwide organization promoting the development of professional skills. The next will be held in Leipzig, Germany in 2013.

Objectives

The actions developed by SENAI in the Olympics have the following objectives:

- Encouraging young people who are in process of formation;
- Encourage better performance level of students in each occupation;
- Provide to the students the opportunity to experience in testing situations similar to those they will face in their professional lives;
- Promote the technical and pedagogical exchange of participants (teachers and students);
- Promote vocational training to the public, as an instrument of eco-efficiency in professional interaction job-market;
- Enthuse and encourage the young people to the values and advantages of Vocational Training;
- Strengthen and promote the SENAI brand as seal of excellence in training professional technicians for industry;
- Approaching, increasingly, the realities of Vocational Education to the labor market and environmental needs of the industry;
- Promote dissemination of technology;
- Show to society for the qualitative outcome of Vocational Training practiced in SENAI System.

Numbers of Knowledge Olympics 2012 and WorldSkills Americas.

- Participating States: 26 and the Federal District
- Participating countries: more than 20
- Competitors: (Knowledge Olympics 2012 + WorldSkills Americas 2012 = 870 competitors)

Occupations

Students will be competing in 50 industrial occupations and 04 commercial occupations, all in accordance with specified standards, technical rules and in conditions of quality, safety and environmental preservation.

Automotive

- Automotive Bodyshop
- Car Mechanics and Car Mechanics (Wheelchair Competitors)
- Automotive Paint

Construction and Buildings

- Application of Ceramic Coating
- Plumbing and Gas Installation
- Building Electricity
- Industrial Electricity
- Masonry Construction
- Joinery
- Joinery structures
- Gardening and Landscaping
- Refrigeration Mechanical
- Steel Structures
- Technology in Buildings

Fashion and Creativity

- Offset Printing
- Manufacture of Footwear
- Jewellery
- Making Clothing and Sewing (Deaf Competitor)
- Fashion Technology

Personal Services

- Hairdresser
- Confectionary
- Kitchen
- Restaurant service
- Technical Nursing
- Bakery (Competitors with down syndrome)

Information Technology and Communication

- STI
- IT - Software Solutions and Information Technology (Blind Competitors)
- Web Design
- Installation and Maintenance of Networks
- Graphic Design

Engineering and Manufacturing Technologies

- Polimechanic
- Integrated Manufacturing
- Mechatronics
- CAD
- CNC lathes
- CNC Milling
- Construction of Molds

- Welding
- Aircraft Maintenance
- Industrial Electronics
- Drywall Construction System
- Machining Mechanics
- Mobile Robotics
- Boilers
- Workplace Safety
- Maintenance Mechanics
- Turnery
- Milling
- Precision Mechanics
- Industrial Robotics
- Instrumentation and Process Control
- Tooling
- Dimensional Metrology
- Environmental Development

KNOW THE OCCUPATIONS

Automotive Bodyshop

Every day, thousands of vehicles are damaged in traffic accidents. The Technical in Bodyshop Services should carry out the repair safely. However such repair can be challenging because each vehicle to be repaired presents a distinct problem. The Technical in Bodyshop Services should apply their vast knowledge of automobile engineering and repair techniques in choosing the appropriate method for each service.

Car Mechanics

There was a day engines which were composed of separate mechanical systems, and the diagnosis was easier. Today, the automotive market is more sophisticated and modern and there is tight integration between all components. An engine failure can result from a multitude of problems, be they mechanical, electrical, electronics are. HR professionals must understand the functioning of the systems that make up the car, as well as troubleshooting, maintenance and repair.

Automotive Paint

The automotive painter applies several types of protections, such as anti-corrosive protection, Wash Primer and paint for internal and external areas of vehicles. He will correct minor damage to the bodywork vehicle, related to its painting and aesthetics through the application of the following techniques: Fill of mashed with stuffing and buffer polyester; apply a corrosion resistant primer, filler primers and sealers; Dry sanding on all repairs performed (will not be allowed to use of wet sanding at OEM parts and applying firsthand / primers; based matte painting water-based, acrylic varnish 2K (two-

component); finishing (polishing); applying decorative ink jets as well as traced drawings, intense color (color shots); repair and placement of prints / engravings; repair light damage in the painting; mixture of firsthand paint and 2K of solid colors. Hood of automotive paint, the process of preparation and finishing of automotive parts painted and the diagnosis of faults in mixing and blending.

- **Application of Ceramic Coating**

Application of Ceramic Coatings refers to the placement of ceramic plates, tiles and natural stones in the residential walls, floors and stairs, industrial and public buildings, churches, swimming pools, external facilities and facades. It also includes construction of small walls and passages of bricks or blocks.

- **Plumbing and Gas Installation**

Much more than plumbers. Each day this profession becoming more complex, adding new material as modern polypropylene tubes with an inner coating of aluminum. But in this test, is required much more than technical and components knowledge. One should also know about standards of quality, finish and as fit projects to the problems

- **Building Electricity**

One area in constant evolution. The electrical systems are every day more complex, integrating supply, lighting, automation and security networks. It takes a lot of energy of competitors to keep up. Of them is required to install exhaust fans, build distribution channels, find faults in electrical networks with agility, running cables, check safety conditions and cope with all the challenges of the profession in just 22 hours of competition

- **Industrial Electricity**

Highly complex electrical system that allow an industry function. This is the focus of this professional, that should know about fitting pipes for passage of wires and cables, computer in process automation, motor drives through programmable controllers and more to bring energy to the production.

- **Masonry Construction**

Millenary knowledge which began with the pile of stones, today the technology in the construction market is becoming increasingly advanced. In this SENAI course, students learn from simply putting bricks to erect a modern building with building blocks and concrete. In the Olympics, knowledge is required of the competitors on the use of columns, beams, moldings, correct timing of use of mortar, alignment, creativity, techniques for creating different forms and economy of materials.

- **Joinery**

One of the oldest professions of humanity and that continues to evolve. From hardwood to MDF, from ornate details of the past to the aesthetic composition with glass and metal, the area now adds a multitude of materials and finishing techniques. In the test, the competitors are faced with challenges from creating drawers with dovetail (finishing at the bottom that resembles a bird's tail), installation of gas articulated arms and telescopic slides (allowing full opening of the drawer) and making panels with teak (massive pieces of grouped eucalyptus) to create different types of furniture.

- **Structures Joinery**

The professional of Joinery Structures, manufactures through various fittings, artifacts from solid wood, such as door, windows and stairs. It is a specific area of the Joinery that requires a lot of skill, since most of your joints are made with hand tools such as saws and chisels.

- **Gardening and Landscaping**

Professionals who make beautiful and harmonious paths where everyone goes. His work involves grasses, ornamentals, trees, shrubs, fountains, woods, paving the ride and more to turn on outdoor in havens. But the proof, not all flowers. Competitors need to know much about agronomy, planting and pruning of plants, construction, electrical, plumbing and carpentry, and especially notions of design and alignment to create beautiful landscapes in just 22 hours.

- **Refrigeration Mechanical**

Coolers, refrigerators, air conditioners. Where we passed, there is always conditioned environments and equipment such as cold desks in markets, freezers in restaurants, refrigerators in every home. Therefore, those who work in this area, know that Refrigeration Mechanical is far from a cold. The occupation covers installation, operation and maintenance of cooling systems in accordance with the technical standards of quality, safety, health and environmental protection, requiring expertise in thermodynamics, chemistry, electricity and electronics for an accurate diagnosis, to ensure efficiency of the apparatus.

- **Steel Structures**

The area of Steel Structures encompasses the construction of steel structures, its premises and assembly, maintenance and repair, as well as general metal machining and welding to industrial and private sectors. The main areas are iron and steel works, metallurgical, welding techniques and adaptation.

- **Technology in Buildings**

In the fields of architecture and civil engineering, construction is a process that consists in building and assembling of infrastructure. Far from being a single activity, large scale construction is a multi task. Normally the job is managed by the project manager and supervised by the construction manager, design engineer, construction engineer or architect.

- **Offset Printing**

Plan, prepare the printing equipment, reproducing printed, meeting color patterns, technical standards, occupational safety and environmental management. The offset products printing involves the production of printed materials in sheet-fed type printing machines, and other equipment that are required to perform finishing of manufactured products. The operators of offset printing must master a number of skills and knowledge. Operators also must be able to prepare mixtures of paint and perform cutting operation in guillotines, as per customer specifications about the product. Quality control should be ensured through the use of espectrodensitometers, which are used to verify and adjust the print quality.

- **Manufacture of Footwear**

Who chooses to work in this area knows very well where stand. The footwear industry in Brazil is growing very well economically and thereby also increases the level of demand. Much more than make a well done shoe, you need to know to create the computerized mold and calculate the consumption of raw materials, favoring the economy and production of the minimal leftovers. Are also considered the correct selection of the waste produced, the quality of the cutting, sewing, finishing and creativity in design.

- **Jewellery**

Technical and knowledge in this area are worth much. This is because the raw materials are metals and gemstones such as gold, silver and diamond, and any errors affect the final quality and price of a piece. Competitors, especially manual skill and control equipment are required, to ensure the perfect confection of complex parts and extreme beauty, a requirement of the select consuming public to jewelry items.

- **Making Clothing and Sewing (Deaf Competitors)**

Who thinks that to enter in the textile industry enough to know fashion, sewing and types of cloths, is wrong. Today, the machinery of the sector incorporating high digital technology and electronic commands. The molds often are made directly to computer, for CAD software (Computer Assisted Design). And the evidence includes creating garments with different characteristics, varying materials like knits and fabrics, and designs from traditional to modern.

The professional of this occupation develops modeling using industrial automation or manual from making clothes area, according to this measurement chart, builds technical sheet, fits models with the aid of technical sheet. Prepares fit, determines length and average consumption of materials. Runs cutting work being guided by the risk matrix, establishing percentage of consumption and waste. Performs cut using machines and table. Sewing parts according to specific technical standards and in conditions of quality, safety and environmental preservation.

- **Fashion Technology**

The professionals of Fashion Technology working in direct contact with customers in the production or customized of clothing for individual customers. They create pieces of clothing using their knowledge of materials and accessories, fashion and color trends and work within the parameters and requirements of the client/company to whom they are producing. Fashion professionals who work in small companies generally carry most processes modeling, sewing, and creating and designing clothes. They are technical experts in making clothes and very efficient in handling different materials, plus the ability to use both industrial sewing machine as hand sewing techniques.

- **Hairdresser**

The Hairdresser is a professional who treats and takes care of the hair of men and women, understanding treatment as using all the techniques of cutting, coloring and styling. The hairdresser works to emphasize the appearance and personality of clients.

Thus, the Senac course combines fashion knowledge, creativity and imagination to the skill in performing commercial and artistic productions.

- **Confectionary**

The confectioner has a high level of knowledge and skill in practical work because they are required to produce a variety of items requested. Confectioners create an abundant variety of delicious products for all types of events, and employ artistic talents and culinary skills. Must be ready to work economically and applying their techniques as planning and according to the Rules and Procedures Technical and Quality, Safety, Hygiene, Health and Environmental Conservation. The confectioners are specialized in the manufacture of decorated cakes, mini cakes, pastries to specific bases, chocolate / pralines, marzipan modeling, hot and cold desserts, as well as creating decorative pieces of chocolate, sugar, marzipan, nougatine and pachwork.

- **Cookery**

A cook is trained to plan menus, prepare a variety of foods according to the rules of health and safety and manage a commercial kitchen. In the course of Senac, the student is encouraged to prepare meals that are both attractive as nutrients, besides developing responsibilities for cost, safety and food hygiene.

- **Restaurant service**

The waiter is a professional who takes care of the reception and customer care, food and beverage services and housekeeping care from the point of sale. It is necessary that these professionals hold extensive knowledge about food, drink and service techniques. The course of Senac encourages the student to perform its function with resourcefulness, creativity, good communication, confidence and practical skills in addition to knowing and applying the rules of good manners.

- **Technical Nursing**

The technical nursing is the professional who performs prevention, promotion, and restoration of individual and collective health, at all levels of complexity, using health technology to provide care at all stages of human development. Promotes educational activities, integrates and interacts with the healthcare team, family, community and society, under the supervision of a nurse.

- **Bakery (Competitors with down syndrome)**

From artisanal and warm of bakery to on produced an industrial scale and distributed nationally, nobody dispenses traditional bread on your table. And to realize this huge demand, the competitors of this area need literally hands-on. Proofs charge different techniques, such as the production of bread, rustic made with sourdough and even sculptures mass. Uniformity, weight, texture, flavors and attractiveness helps win points.

- **STI**

An integrated wireless world. Mobile communication is here to stay. Intelligent buildings add several technologies that unite the best of electricity, electronics and computer technology to make life easier for the user of information systems. The great demand nowadays is by wireless broadband, which allows access to data, voice and image, anytime, anywhere. And the professionals in this area are responsible for all work properly.

- **IT - Software Solutions and Information Technology (Blind Competitors)**

A quick walk of globalization in recent decades has largely been directed to the development of Information and Communication Technology (ICT). IT specialists are in great demand increasing in many areas, one of which is the provision of software solutions for business. These professionals are not merely users of Microsoft Office. They are powerful users who have deep knowledge of each application of this package. Their skills can be used in abundance beyond the huge number of industries, cultures and languages.

- **Web Design**

A relatively new profession, but full of knowledge in a wide field of work. Beyond making web pages more visually appealing to the user, the Web Designer is responsible for updating a website, create internal navigation links, elaborate graphics elements that guide Internet users, manage content, apply texts and treat photographs. In

competition, of these professionals is required software domain, notions of employed technology, knowledge of type and visual arts, attention to copyright, creativity and agility in the solutions.

- **Installation and Maintenance of Networks**

Information technology to the letter. Professionals in this area are responsible for the correct and safe operation of data transmission networks, integrating equipment and computer programs. Of these professionals is required to break equipment passwords, control access of users on a network, install routers, configure file servers and protection, broadband sharing, establishing communication between departments and units of a company and facilitate the use of e-commerce tools. Being updated is critical, because in this field of knowledge, the new of yesterday is the old of tomorrow.

- **Graphic Design**

Graphic designers typically work in advertising agencies, communications departments of companies, graphic and image bureaus. They can be called Art Directors, Production Designer, Art Assistant, Assistant Advertising, Visual Developer, Graphic Designer and Graphic Designer. In graphic and bureaus they can be called Graphic Production Assistant and Art-Finalists. Without losing focus in aspects of aesthetic, formal and functional, adapting them to the concepts of information and communication in effect, and adjusting them to the marketing appeal and user needs. Also

accompanying the execution process and reproduction of graphic design, in accordance with specific standards, technical standards and customer needs in terms of quality, safety and environmental preservation.

- **Polimechanics**

Professionals working in Polimechanics are responsible for performing the manufacturing, installation and maintenance of mechanical assemblies, machining devices, dimensional control, assembly of automated components such as programmable controllers, control elements and pneumatic and hydraulic motion, evaluating conditions of operation of its interfaces according to the specified standards, designs and technical standards in terms of quality, safety and environmental preservation.

- **Integrated Manufacturing**

Professionals working in the occupation of Integrated Manufacturing conceive, design, build, test, adjust and demonstrate the operation of prototypes that meet a set of requirements previously established, generating the necessary records and striving for the rational use of resources, quality of executed services, safety of those involved and environmental preservation.

- **Mechatronics**

Mechatronics technicians develop (build) engineering systems for the automation industry. The Mechatronics consists of the technologies mechanics, electrical-electronics and computing. Computer technology is

element for applications in information technology, control systems of programmable machines and technology that enables communication between machines, equipment and people. This category combines skills in mechanics, pneumatics, electronically controlled systems, programming, robotics and systems development. Technicians in mechatronics design, build, maintain and repair automated equipment and program the control system of the equipment.

- **CAD**

Mechanical Design includes the use of technology Computer Aided Design (CAD) in the preparation of graphical models, drawings, texts, documents and files that contain the necessary information to the manufacture and documentation of parts and components, which serve as solutions to the problems that mechanical engineering faces. These solutions must fit the latest edition of industry standards and ABNT, DIN and ISO.

- **CNC Lathesmanship**

CNC lathesmanship is a process used to produce metal parts and components with cylindrical geometry, using a numerically controlled machines called CNC Lathes. Remedy any proposed situation, from a technical drawing the operator must develop the CNC program defining the cutting tools needed to manufacture the project presented, respecting all dimensional aspect with dimensional tolerances of 0.01 mm. CNC Lathes can be programmed via

interface or even through computer-assisted manufacturing (CAM) systems. The operator can use both systems to develop the final design according to the specifications required in technical drawing.

- **CNC Milling**

The CNC milling work aims to fabricate metal parts by machining with machines called CNC Milling or Machining Centers. The abbreviation (CNC) refers to Computerized Numerical Control to read the instructions (G code) and translate them into command instructions that control the movements of the machine-tool. The CNC machine is used for manufacturing tests projects through the selective removal of metallic material. CNC machines are extremely flexible and have different paths and manufacturing techniques that can be applied to development tasks.

- **Construction of Molds**

The modality of Construction of Molds is sought by customers who want to produce plastic parts (e.g. mobile phones, tablets, automotive parts etc.). From a drawing or a sketch the area of Construction of Molds then designs and builds the metal mold that will produce plastic parts. The manufacturing is done with commercial and standardized materials (Hasco, Meusburger, EOC). The molds must be designed for mass production of samples (10 to 1000 cycles). The manufactured mold can be easily mounted via functional mold holder, which offers performance of plastic parts for durability testing of a new product, to the research and development departments.

- **Welding**

The welder is a craftsman that requires manual skills to perform their work. Different welding processes are needed for different types of materials. The welder should be able to understand technical drawings, patterns and markings, apply the correct welding processes and know the characteristics of the materials, but also know and work according to safety standards. The welder joins components, structures, pipes, tanks and plates. Terms of reference of standards and definitions for welding processes, welding position and welding tests should be in accordance with the ISO (International Standard Organization) and AWS (American Welding Society).

- **Aircraft Maintenance**

The Aircraft Maintenance Technician operates primarily in a company that provides Aircraft Maintenance Services, performing inspection, maintenance, technical troubleshooting, removal, installation and repairs of Aeronautical Systems. At the end of the service, the Aircraft Maintenance Technician with a licensed professional must certify that the aircraft may be cleared for flight. The theoretical and practical training in Aircraft Maintenance Technician involves airframe, engine and propeller, which include electrical, avionics, pneumatic, hydraulic and mechanical equipment of an aircraft.

- **Industrial Electronics**

This occupation involves manufacturing, testing and troubleshooting electronic equipment. The professionals in electronics are enabled to build equipment and electronic systems and other special applications. Using special hand tools, welders, measuring devices and computers. Since mass manufacturing processes have become highly automated, professionals of this area also work on building prototypes before production, maintenance and repair of systems.

- **Drywall Construction System**

Building using lightweight metal structures and components of dry construction system, according to technical standards, health, work safety and the environment or in our course in partnership with Knauf, where the professional develops practical skills for the correct execution of walls, ceilings and walls with lightweight systems using special tools, according to the specific technical standards and ensuring the quality, safety and respect for the environment.

- **Machining Mechanical**

Professionals working in Mechanical Machining - Adjustment fabricate, adjust, repair, install parts and equipment in mechanical set and machining devices and precision control, based on drawings and technical specifications established in design, handling instruments for measuring, testing and control, performing manual work at bench and machine tools such as universal milling

machine, horizontal lathe, grinding flat, column and bench drill, according to specified patterns, designs and technical standards in terms of quality, safety and preservation environment.

- **Mobile Robotics**

Mobile Robotics Technicians are responsible for the mechanical and electrical assembly, configuration, maintenance and operation of programmable and automatic equipment, capable of delivering parts and raw materials and to perform tasks such as identifying objects and navigate mazes. Examples are robots that begin to hit the market to perform household chores such as mowing and vacuum the floor. It required the competitors to solve logic problems, develop prototypes, configure prefabricated machines and control system, schedule a series of tasks to be performed by the unit and interpret data sent by them on the basis of technical documents from the manufacturer.

- **Boilers**

Mathematics in the service of consumer. The professional in this area works in industrial laboratories analyzing the quality and precision of products. To do so, perform measurements with intricate mathematical formulas which operate dimensional control software and make final adjustments or notes about the ideal calibration to minimize the chance of a defective material into the hands of the customer.

- **Labor Safety**

Minimize chances of accidents and ensure the health of the employees. This is the function of technical labor safety. In the competition, they must develop projects that include the provision of furniture and equipment, types of lighting and flooring, consider the possibility of chemical or biological contamination, establish safety rules and procedures, and promote educational activities for risk reduction.

- **Maintenance Mechanics**

The professionals in Mechanical Maintenance detects, prevents or corrects failures and defects in equipment or industrial systems in order to maintain reliability, according to the technical documentation and terms of quality, safety and environmental preservation.

- **Lathe Operator**

The Lathe Operator is responsible for planning and executing the machining of metal parts, non-metallic and composite in horizontal lathe, controlling parameters and quality of machined parts, according to specified patterns, designs and technical standards in terms of quality, safety and environmental preservation.

- **Milling**

The Mechanical Milling professional is responsible for preparing, regulate and operate the milling machine-tool, through which develops the machining process called milling. By combination of rectilinear or rotary movement generated by the milling and turning the tool or rectilinear

called cutter, it is possible to operate the machining of pieces of different types and in different materials, such as metallic and non-metallic, using tools of high speed steel, of high speed steel coated, with metal carbide and indexable inserts, preparing, regulating and controlling the cutting parameters of machined parts and mechanical assemblies, according to technical drawings, designs and technical standards in terms of quality, hygiene, health, security and environmental preservation.

- **Precision Mechanics**

The professionals at Precision Mechanics produces mechanical sets with a high degree of complexity and accuracy through manufacturing, assembly and adjustment of parts, devices and instruments, with limits of dimensional tolerances, shape, position and surface texture compatible with the specifications, in accordance with drawings, designs and technical standards in terms of quality, safety and environmental preservation.

- **Industrial Robotics**

This mode has a particularity: the robots are produced 3 months before exams. To ensure that teams are responsible for the project, they have to bring the pieces of the machine and mount it in front of evaluators. The project is evaluated for creativity, production costs and efficiency of automata, which must identify and perform tasks such as pick up and carry objects.

- **Instrumentation and Process Control**

Several variables need to be monitored in an industrial process: temperature, pressure, viscosity, flow rate, pH and others. For everything to work properly, the professional of this area should know plan, choose systems and platforms, configure wired and wireless networks, eliminate interference between electric and electronic appliances, calibrate equipment and monitor the production process through computerized monitoring.

- **Tooling**

The toolmaker creates molds which can reach large proportions as those stamp car doors. Some of these forms may harbor a person in, but with so much size, every inch is important, and accuracy is key word in this process. The competitor must master its function from design to construction tool of metal sheet forming and operating adjustments to perfection part.

- **Dimensional Metrology**

Mathematics in the service of consumer. The professional in this area works in industrial laboratories analyzing the quality and precision products. To do so, performs measurements with intricate mathematical formulas, operates dimensional control software and makes final adjustments or notes about the ideal calibration to minimize the chance of a defective material into the hands of the customer.

- **Environmental Development**

The Environmental Technician is responsible for coordinating, within her performance, deployment, monitoring and project evaluation processes and control systems and environmental management, considering the technical, economic and legal issues, with a view to sustainable development, based on standards, legislation and good sense, acting preemptively in risky situations and interacting with the various areas of the company in the implementation of management policies and environmental control.

Table of Competitors by Occupation



PARTICIPATION RECORDS OC2012/ WSA/JWC

| Occupation / Delegation | | | | | | | | | | | | | | | | | | | | | OC2012 | | WSA | | TOTAL Deleg. | TOTAL Conc. | | | | | | | | | | |
|--|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|--------------|-------------|-----------|------------|------------|------------|--------------|------------|--------------|----|----|----|
| | AC | AL | AM | AP | BA | CE | DF | ES | GO | MA | MG | MS | MT | PA | PB | PE | PI | PR | RJ | RN | RO | RR | RS | SC | | | SE | SP | TO | N° Deleg. | N° COP Conc. | N° Deleg. | N° COP Conc. | | | |
| 01 - Polymechanics | | | | | | | | | | | 1 | | | | 1 | 1 | | | | | | | 1 | | | 1 | 5 | 5 | 3 | 3 | 8 | 8 | | | | |
| 02 - STI | 1 | | | | 1 | | | | 1 | | | | | | | 1 | | | | | | | | | | | 1 | 6 | 6 | 4 | 4 | 10 | 10 | | | |
| 03 - Integrated Manufacture | | | | | | | | | | | 3 | | 3 | | | | | 3 | | | | | 3 | | | 3 | 5 | 15 | | | 5 | 15 | | | | |
| 04 - Mechatronics | | | 2 | | 2 | 2 | | | | | 2 | | 2 | | | 2 | 2 | | | | | | 2 | 2 | 2 | | 10 | 20 | 10 | 20 | 20 | 40 | | | | |
| 05 - CAD | | | 1 | | | | 1 | 1 | | | 1 | 1 | | | | 1 | 1 | | | | | | | | | 1 | 10 | 10 | 5 | 5 | 15 | 15 | | | | |
| 06 - Turnery CNC | | | 1 | | 1 | | | | 1 | | 1 | | | | | | 1 | 1 | | | | | 1 | 1 | 1 | | 9 | 9 | 7 | 7 | 16 | 16 | | | | |
| 07 - Milling CNC | | | 1 | | 1 | | | | | | | | | | | | 1 | 1 | | | | | 1 | 1 | 1 | | 8 | 8 | 4 | 4 | 12 | 12 | | | | |
| 08 - Molds construction | | | 1 | | | | | | | | 1 | | | | | 1 | | | | | | | 1 | 1 | 1 | | 6 | 6 | | | 6 | 6 | | | | |
| 09 - IT - Software solutions | | 1 | 1 | | | 1 | 1 | | 1 | | 1 | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 16 | 16 | 4 | 4 | 20 | 20 | | |
| 10 - Welding | | | | | 1 | 1 | 1 | 1 | | 1 | | | | 1 | 1 | 1 | 1 | 1 | | | | | 1 | | 1 | 1 | 14 | 14 | 13 | 13 | 27 | 27 | | | | |
| 11 - Offset Printing | | | 1 | | 1 | | | | 1 | | | | | | | | | 1 | | | | | 1 | | | | 7 | 7 | | | 7 | 7 | | | | |
| 12 - Ceramic Coating | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | | 1 | 1 | 1 | | | | 1 | 1 | 1 | 1 | 18 | 18 | 3 | 3 | 21 | 21 | | |
| 13 - Automotive Body Shop | | | | | | | | | | | 1 | | | | | | | | | | | | | | | 1 | 2 | 2 | 3 | 3 | 5 | 5 | | | | |
| 14 - Aeronautical Maintenance | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 2 | 2 | | | 2 | 2 | | | | |
| 15 - Hydraulic and Gas installation | | | 1 | | | | | | | | | 1 | | | | | 1 | | 1 | | | | | | 1 | 6 | 6 | 5 | 5 | 11 | 11 | | | | | |
| 16 - Industrial Electronics | | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | | | 1 | | 1 | 1 | 1 | | | | | | | 1 | 15 | 15 | 7 | 7 | 22 | 22 | | | | | |
| 17 - Web Design | | 1 | 1 | | | | 1 | | | 1 | 1 | | | | | 1 | 1 | 1 | | | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 14 | 14 | 5 | 5 | 19 | 19 |
| 18 - Building Electricity | 1 | 1 | 1 | | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 23 | 10 | 10 | 33 | 33 | | | | |
| 19 - Industrial Electricity | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 20 | 6 | 6 | 26 | 26 | | | | | |
| 20 - Masonry Construction | | 1 | | | 1 | 1 | 1 | | | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 17 | 5 | 5 | 22 | 22 | | | | | |
| 21 - Drywall Construction System | | | 1 | | | | | | | | 1 | | | | | | | 1 | | | | | | | 1 | 4 | 4 | 3 | 3 | 7 | 7 | | | | | |
| 22 - Machining Mechanics | | | | | 1 | | | | 1 | | 1 | 1 | | | 1 | 1 | 1 | 1 | | | | | | 1 | 11 | 11 | 11 | 11 | | | 11 | 11 | | | | |
| 23 - Mobile Robotics | | | | | 2 | | | | | | 2 | 2 | 2 | | | 2 | 2 | | | | | | 2 | 2 | 2 | 9 | 18 | 6 | 12 | 15 | 30 | | | | | |
| 24 - Carpentry | 1 | 1 | 1 | | | 1 | | 1 | | 1 | | 1 | 1 | | | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 15 | 15 | 5 | 5 | 20 | 20 | | | | | |
| 25 - Structure Carpentry | | | 1 | | | | | | | | 1 | | | | | | | | | | | | | | 1 | 4 | 4 | | | 4 | 4 | | | | | |
| 26 - Shoe Confection | | | | | | | | | | | 1 | | | | | | | | | | | | | 1 | 1 | 1 | 5 | 5 | | | 5 | 5 | | | | |
| 27 - Jewellery | | | | | | | | | | | 1 | | | | | | | 1 | | | | | 1 | | 1 | 4 | 4 | | | 4 | 4 | | | | | |
| 29 - Hair Stylist | 1 | | 1 | | 1 | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 17 | 6 | 6 | 23 | 23 | | | | | |
| 30 - Clothes Confection | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 20 | 20 | 4 | 4 | 24 | 24 | | | | | |
| 31 - Fashion Technology | | | | | 1 | 1 | 1 | | | | 1 | | | | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 10 | 10 | 4 | 4 | 14 | 14 | | | | | |
| 32 - confectionery | | 1 | | | | 1 | | | | | 1 | | | | | 1 | | 1 | | | | | 1 | 1 | 1 | 8 | 8 | 4 | 4 | 12 | 12 | | | | | |
| 33 -Auto mechanics | 1 | | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 16 | 16 | 6 | 6 | 22 | 22 | | | | | |
| 34 - kitchen | | | 1 | | 1 | | 1 | | | | 1 | | | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | 9 | 12 | 12 | 21 | 21 | | | | | |
| 35 -Restaurant Service | | | | | 1 | | 1 | | | 1 | 1 | | | | | 1 | 1 | | | | | | 1 | 1 | 1 | 8 | 8 | 9 | 9 | 17 | 17 | | | | | |
| 36 - Automotive painting | | | | | | | | | | | 1 | | | | | | | | | | | | | 1 | 1 | 2 | 2 | 3 | 3 | 5 | 5 | | | | | |
| 37 - Gardening and Landscaping | | | | | | 2 | | | | | 2 | | | | | | | | | | | | | | 2 | 3 | 6 | 3 | 6 | 6 | 12 | 12 | | | | |
| 38 - Refrigeration Mechanics | | 1 | 1 | | | | 1 | | | | 1 | | | | | 1 | | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 12 | 12 | 5 | 5 | 17 | 17 | | | | | |
| 39 - Net Maintenance and installation | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | | | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 18 | 7 | 7 | 25 | 25 | | | | | |
| 40 - Graphic Design | | | 1 | | | 1 | | | 1 | 1 | | | | | | | 1 | 1 | | | | | | | 1 | 12 | 12 | 6 | 6 | 18 | 18 | | | | | |
| 41 - Nursing Technician | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | | | | 2 | | | | | 2 | 2 | 2 | 2 | 14 | 28 | 4 | 8 | 18 | 36 | | | | | | |
| 42 - Metallic Structures | | | | | | | | | | | 1 | | | | | | 1 | 1 | | | | | 1 | | 4 | 4 | | | 4 | 4 | | | | | | |
| 43 - Boilers | | | | | | | | | | 1 | 1 | | | | | 1 | | 1 | 1 | | | | | 1 | 7 | 7 | | | 7 | 7 | | | | | | |
| 44 - Work Safety | | 1 | | | 1 | | 1 | | | | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 17 | | | 17 | 17 | | | | | |
| 45 - Bakery | 1 | 1 | | 1 | 1 | 1 | 1 | 1 | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 16 | 16 | | | 16 | 16 | | | | | |
| 46 - Maintenance Mechanics | | | | | 1 | 1 | | | | | 1 | 1 | | | 1 | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 12 | 12 | | | 12 | 12 | | | | | |
| 47 - Turnery | | 1 | | | 1 | | 1 | | | | 1 | 1 | 1 | | | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 18 | 18 | 8 | 8 | 26 | 26 | | | | | |
| 48 - Milling | | | | | 1 | | | | | | 1 | 1 | | | | | 1 | 1 | | | | | 1 | 1 | 1 | 7 | 7 | 4 | 4 | 11 | 11 | | | | | |
| 49 - Precision Mechanics | | | | | | | | | | | 1 | | | | | 1 | 1 | | | | | | 1 | | 1 | 6 | 6 | | | 6 | 6 | | | | | |
| 50 - Industrial Robotics | | | | | | | | | | 3 | 3 | | | | | 3 | 3 | | | | | | 3 | 3 | 3 | 6 | 18 | | | 6 | 18 | | | | | |
| 51 - Instrumentation and Process Control | | 1 | | | 1 | | | | | 1 | 1 | | | | | 1 | 1 | 1 | | | | | 1 | 1 | 1 | 8 | 8 | | | 8 | 8 | | | | | |
| 52 - Tooling | | | 1 | | | | | | | | 1 | | | | | | 1 | 1 | | | | | 1 | | 1 | 6 | 6 | | | 6 | 6 | | | | | |
| 53 - Dimensional Metrology | | 1 | | | | | | | | | 1 | | | | | 1 | 1 | | | | | | 1 | | 1 | 6 | 6 | | | 6 | 6 | | | | | |
| D2 -Environmental development | | | 1 | | | | | | | | 1 | | | | | 1 | 1 | | | | | | 1 | 1 | 1 | 6 | 6 | | | 6 | 6 | | | | | |
| D3 - Building Technology | | | | | | | | | | | 5 | | | | | | | | | | | | | | 5 | 2 | 10 | | | 2 | 10 | | | | | |
| DE - Textile Technology | | | | | | | | | | | | | | | | | | | | | | | | | 3 | 1 | 3 | | 1 | 3 | | | | | | |
| JW - JWC - Junior World Championship - Confectionery | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 14 | 14 | | | | | |
| P1 - Sewing (deaf competitors) | | 1 | | | | | | | 1 | | 1 | 1 | 1 | | | | 1 | 1 | | | | | | 1 | 1 | 9 | 9 | | | 9 | 9 | | | | | |
| P2 -Bakery (Competitors with Down Syndrome) | | 1 | | 1 | | | | | | 1 | 1 | 1 | 1 | | | 1 | 1 | | | | | | 1 | 1 | 1 | 10 | 10 | | | 10 | 10 | | | | | |
| P3 - Automotive Mechanics (Competitors in wheelchairs) | | 1 | | | | 1 | | | | | 1 | 1 | 1 | | | | | | | | | | | 1 | 1 | 7 | 7 | | | 7 | 7 | | | | | |
| P4 -Information Technology (blind competitors) | | 1 | 1 | | | 1 | | | | 1 | 1 | 1 | | | | | 1 | | | | | | | 1 | 1 | 10 | 10 | | | 10 | 10 | | | | | |
| TOTAL | 11 | 25 | 21 | 5 | 26 | 22 | 22 | 13 | 21 | 11 | 69 | 14 | 23 | 10 | 16 | 39 | 5 | 40 | 31 | 15 | 14 | 7 | 46 | 38 | 15 | 66 | 15 | 572 | 654 | 193 | 216 | 765 | 870 | | | |

WSA - 24 countries / 20 competing countries
Total competitors 216
Total evaluators 216

JWC - 8 countries
Total competitors 14
Total evaluators 10

OC - 4 countries / 20 competing countries
Total competitors 654
Total evaluators 572

870
798

EVALUATION IN THE OLIMPÍADA DO CONHECIMENTO

The evaluation is based on evidence that contemplate, so comprehensive, integrated and continuous professional skills of competitors, similar to a real work situation faced by a professional in its occupation.

GENERAL INFORMATION ABOUT THE COMPETITION

Place:

Anhembi Parque

Avenida Olavo Fontoura, 1209 - Santana São Paulo
CEP 02012-021, São Paulo - SP
Tel: 55 (11) 2226-0400
www.anhembi.com.br

The Anhembi Park, the most versatile and one of the largest conference centers in Latin America, is located in São Paulo, the second best city in the world to do business.

With 400,000 m² of total area hosts 30% of the events that happen in Brazil and 55% of the events in the Southeast of Brazil. His areas receive more than 1,000 events per year, of various types and sizes. It is estimated that circulating through the Anhembi more than 11 million people in the period.

It is located in prime location, with easy access, close to airports, hotels and major expressways. It also has the largest parking lot of the city with 7500 spaces and capacity to receive 13 000 vehicles (rotary) per day. Located next to two major freeways in São Paulo: Marginal Tietê (access to roads and areas east /

west) and Avenida Santos Dumont (access to the center and south). Ease of access to airports of Guarulhos (international / national) and Congonhas (national and airlift RJ).

Competition period

The Olympiad takes place 12-18 November. The pavilion will be open to visitors from 14 to 17 November, from 9 a.m. to 5 p.m. and 18th November, from 8:30 a.m. to 4 p.m.

Open: 11/12 at 3 p.m. - Ginásio do Barueri

Ambiance: 11/13 at 8 a.m. Exhibition Pavilion of Anhembi

Begin of Competition: 11/14 at 8:30 a.m. Exhibition Pavilion of Anhembi

End of competition: 11/17 at 4 p.m. Exhibition Pavilion of Anhembi

City Tour: 11/18 at 8 a.m. Cantareira Country Center

Closing and awards: 11/18 at 6 p.m. - Ginásio do Barueri

Receptive

The receptive consists of a team of SENAI technicians of São Paulo. Each delegation will have a technician responsible for airport pickup, tracking the displacements, support throughout the event and return to your state or country.

Public served - national and international competitors, team leaders, leading appraisers, assessors, teachers of the national program of teacher training and technical delegates.

Entre as atribuições do receptivo, destacamos:

- receptive at the airport;

- presentation and integration by the system (site) with the chief of staff at the state or country;
- identification and support to participants, any issues related to baggage loss;
- provide general guidelines for the displacement;
- Kit distribution (food and participant guide), inside the bus;
- assistance in landing, deliver delegation to the guardian angel and monitor the process of check in and check out (airport);
- accompany the delegation and assist the guardian angel in the opening and closing ceremonies;
- accompany their delegation in displacement - hotel / competition / hotel;
- accompany the delegation in displacement hotel / airport / hotel;
- accompanying delegation during the City tour;
- accompany the delegation at check out of the hotel in conjunction with the Guardian Angel;

Throughout the competition, the receptive will be a reference point for team leaders to indicate, forward, guide the resolution of possible needs, such as purchasing or replacing equipment, tools, technical components, PPE, food, medical services, among others.

Guardian Angel

The Guardian Angels are a team of SENAI engineers and technicians responsible for monitoring your hosting. The Guardian Angels see to it that everything goes as planned. You can count on the support of these people throughout the event.

Who can use the guardian angel?

National and international competitors, team leaders, leading appraisers, assessors, teachers of the national teacher training, technical delegates.

What is the role of the guardian angel?

- Monitor and facilitate your check-in at Hotel;
- Disseminate daily useful information and general guidelines (schedules, transportation and meals) at the front desk (totems) during the event;
- Track participants during breakfast and dinner, negotiating alternative schedules, if necessary;
- Identify, support and mediate any problems relating to accommodation;
- Track the shipment of participants in transportation;
- Ensure punctuality in transfers between the event / hotel / event;
- Report any emergencies to the medical field;
- Assist in the distribution, at hotel, of kits containing: bag, badge, cap, Participant Guide, notebook, squeeze;
- Ensure that only authorized people use transport event;
- Monitor participants and assist them in matters relating to the opening and closing ceremonies;
- Accompany guests during check out of the hotel, in conjunction with the Receptive;

Accreditation

- Competitors and team leaders will receive the material at the hotel.
- The evaluators, technical support, components of executive and technical coordination of the competition will receive credentials at Anhembi.

- Accreditation of the visiting public will be done at the main entrance of Anhembi.

Uniforms

Participants will be dressed in shirts in the following colors:

Support



Executive Coordination



Technical Coordination



Supervision



Backing



SESI Robotics Judge



INOVA SENAI Competitor



SENAI Competitor



Chief of Staff SENAI



Senac Competitor



Chief of Staff Senac



Evaluator SENAI



Visit Students



Evaluator Senac



Teacher Guide



Transportation

Considering the large amount of people to transport and traffic problems in the city of São Paulo, we call attention to schedules set for the departure of the buses, punctuality is important for all of the daily activities schedules are met.

For questions about the schedule see the Guardian Angel of your Delegation.

Please be advised that in accordance with the law it is forbidden to transport passengers standing.

Hotels / Participants

Participants in the Knowledge Olympics will be hosted in the following hotels:

| Hotel | Participation Profile | Address | Distance to Anhembi | Telephone | Guest Amount |
|-----------------------|---|---|---------------------|--------------------------|--------------|
| BOURBON CONVENTION | Evaluators, WSA Leader Evaluators, Technical Delegates and Future Education and lodging team | Av. Ibirapuera 2927 - Moema | 12,8 km | 11 5091-2323 | 666 |
| COMFORT DOWNTOWN | SENAI teachers and lodging team | R. Araújo 141 - Centro | 5,3 km | 11 2137-4600 | 314 |
| HOLIDAY INN ANHEMBI | General and executive coordination, Competitors, team chiefs and lodging team | R. Professor Milton Rodrigues, 100 - Parque Anhembi | 0,3 km | 11 2107-8873 / 2107-8844 | 1124 |
| ISIB EXPO BARRA FUNDA | Visitors, Leader Evaluators, WSA Technical Delegates and WSA Observers, lodging team | R. Eduardo Viana 163 - Barra Funda | 2,9 km | 11 3393-7373 | 278 |
| MARABÁ | Logistics and Transportation, Infrastructure, Reception personnel, Human Resources, Health, Safety and lodging team | Av. Ipiranga, 757 Centro | 4,6 km | 11 2137-9500 | 90 |
| MERCURE NORTEL | SESI Robotics and lodging team | Av. Luiz Dumont Vilares, 400 - Santana | 4,3 km | 11 2972-8111 | 527 |
| NOVOTEL CENTER NORTE | Technical Coordination, WSA Evaluators, Communication and lodging team | Av. Zaki Harchi, 500 - Vila Guilherme | 2,5 km | 11 2224-4106 / 2224-4104 | 442 |
| NOVOTEL JARAGUÁ | Simultaneous events, Mobile Units, Vila Rica, Visitors and lodging team | R. Martins Fontes, 71 - Centro | 5,8 km | 11 2802-7000 | 395 |
| TVOLI MOFARREI | To be defined | Alameda Santos, 1437 - Caeiro César | 8,0 km | 11 3146-6426 | 37 |
| TOTAL | | | | | 3.873 |

The guest will be responsible for paying the costs of the fridge and other extras (laundry, internet, etc.), except water and breakfast.

Feed

The event will provide the following meals:

- **Breakfast:** served at the hotel where they are staying;
- **Snack:** one in the morning and another in the afternoon;
- **Lunch:** will be served in three separate locations, according to the participant's profile; the place will be informed later by coordination.

- **Time:** from 11 a.m. to 2 p.m.

There will be staggered schedules, which will be informed later.

- The food should be consumed only and exclusively in the environments of the restaurants, can not be taken of these locations

- **Dinner:**

- For the competitors, evaluators and team leaders :

- In the event location

Time: from 6 p.m. to 9 p.m.

There will be staggered schedules, which will be informed later.

- The food should be consumed only and exclusively in the environments of the restaurants, can not be taken of these locations.

- **Other participants**

- Served at the hotel where they are staying

- Time: Check the opening hours of the restaurant in your hotel.

- The food should be consumed only and exclusively in the environments of the restaurants, can not be taken of these locations.

All meals will be provided upon reading the barcode of the participant badge.

Other information:

All meals will be provided upon reading the barcode of the participant badge.

Other information:

Other Information:

- **Cafeteria:** for private use, there are two cafeterias inside the pavilion, administered by the Anhembi, the organization of the OC having no involvement in the supply.
- **Water:** exist in every competitive environment a point with mineral water, in which you can fill the squeeze received in your kit. Always keep it stocked. Remember to drink plenty of water during the event. For other participants, in the pavilion will be points of water distribution.

Medical Service

To assist all participants in the Knowledge Olympics, we will have two emergency medical stations, one located inside the pavilion and another at the opposite end mounted on the outside of the tent Anhembi.

There will always 03 ambulances for care, 2 type of ICU and 01 Basic Support in Pavilion, between the hours of 7 a.m. to 10 p.m., from mounting the event.

Two ambulances of basic support will be available, one at the Mercure Norte hotel from 5 p.m. to 9:00 a.m. and another at the Holiday Inn hotel, in the period from 10 p.m. to 07:00 a.m.

Two ambulances will be on hand during the opening and closing of the Ginásio de Barueri.

In case of a mishap during the night in the hotel, the guardian

angel of the hotel should be fired for that other measures are taken.

Tips for your Health

- Use sunscreen daily with a sun protection factor suitable.
- Use hats or caps and appropriate clothing
- Whenever possible, stay in the shade. Avoid sun exposure between 10 a.m. and 4 p.m. This is the period of greatest radiation.
- Beware of reflective surfaces such as sand, concrete, water; even if you're in the shade, the rays reach you.
- Moisturize skin after exposing yourself to the sun; give preference to lotions or creams containing vitamin E or aloe.
- The food should be rich in fruits, vegetables and proteins.
- Drinking plenty of fluids is also essential, preferably water, natural juices and teas.
- Avoid consumption of canned, processed and filled products.
- Observe the behavior of hygiene in food preparation.

Clothes

In the summer with strong heat is indicated using simple and lightweight clothing such as shirts, shorts, and dresses. However, remember to use appropriate clothing for the event, you represented your state and your school.

Security

This text is required reading, because relate for security aspects that you should have during the Knowledge Olympics 2012. But remember: every security also depends on their preventive actions. Check out these tips:

- **Asset Security**

The concept is the proactive protection of assets and facilities. Actions like throwing trash in the trash, keep public areas of the pavilion, without damaging them, form a more conscious action regarding the care with conservation of public assets.

- **Personal Security**

- Tell to the security guards if you notice suspicious people hanging around inside or outside the pavilion, or feel being followed;
- If you are a tourist, be more careful with their safety. Being in a city you do not know requires more rigorous attention;
- Be aware. Suspects choose preferably victims who are distracted;
- In case of aggression in an attempt of theft, do not resist and handed what the thieves ask;
- Avoid wearing jewelry, watches and other valuables;
- Do not carry all your documents, large amounts of cash or credit cards unless necessary;
- Avoid poorly lit or deserted places;
- Keep your purse or briefcase in front of him. Try to always keep it firmly between his arm and body;
- Do not leave documents in the glove compartment of the car or allow objects you're carrying on banks;
- Try not to go out alone of the Convention Center.
- Security guards and firefighters will also be present at the opening and closing ceremony in Barueri.

- **Safety in the Workplace**

Participants must observe the warnings and traffic signs posted in areas of Anhembi.

To preserve the safety of the participants, the overall coordination of Knowledge Olympics triggered advanced units of the following law enforcement agencies: the Civil Police and the Military Police overt; Battalion Transit, to ease the flow of cars on site, in addition to vigilant to ensure property security and visitors.

USEFUL NUMBERS

| USEFUL NUMBERS | | | | |
|-----------------------|-----------------------|-------------|---------------------------|----------------------------|
| Service Structure | Name | Place | Telephone | Email |
| Air Ticket | Francisco da Justa | DN-Brasilia | (61) 3317 9281/9984 3263 | fjusta@dn.senai.br |
| | Andressa Loiola | DN-Brasilia | (61) 3317 8877/9621 2699 | amelo@dn.senai.br |
| Lodging | Marcio Marinho | DR-SP | (16) 3371 7273/9214 1950 | mmarinho@sp.senai.br |
| | Rosângela Buch | DR-PR | (41) 3271 9286/9979 3204 | rosangela.buch@pr.senai.br |
| Feed | Silvia Carabolante | DR-SP | (11) 3826 6151/97148 0589 | shelena@sp.senai.br |
| | Marcos Rodrigues | DN-Brasilia | (61) 3317 9752/9977 3656 | marcos@dn.senai.br |
| Health | Thereza Maguetas | DR-SP | (11) 3146 7172/99979 5402 | tmaguetas@sesisp.org.br |
| | José Alberto Paganini | DR-SP | (11) 3146 7132/98299 0174 | jpaganini@sesisp.org.br |
| | João Carlos Campos | DR-SP | (11) 3146 7278/98370 8731 | joao.campos@sp.senai.br |
| Transportation | João Campaner | DR-SP | (11) 3322 5101/97145 7992 | campaner@ap.senai.br |
| | | DN-Brasilia | (61) 3317 9003/9822 2995 | mcarvalho@cni.org.br |

GENERAL PROGRAMME (Competitors, team managers and evaluators)



Knowledge Olympics 2012 Schedule Agenda

November 12 to 18, 2012 - Anhembi Park - São Paulo

Legendas

| Schedule | C-6 | C-5 | C-4 | C-3 | C-2 | C-1 | C1 | C2 | C3 | C4 | C+1 | C+2 |
|------------|-------------------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------------------|--------|
| N° of days | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
| Dates | 08/nov | 09/nov | 10/nov | 11/nov | 12/nov | 13/nov | 14/nov | 15/nov | 16/nov | 17/nov | 18/nov | 19/nov |
| Week days | Thy | Fri | Sat | Sun | Mon | Tue | Wed | Thu | Fri | Sat | Sun | Mon |
| Actions | Pre - Competition | | | | | | Competition | | | | Post - Competition | |

| | | | |
|------|------------------------------------|--------|--|
| Cot | General Coordination | C | Competitor |
| SGC | Competition General Department | CIS | Competition Evaluation Integrated System |
| SAV | Evaluation Department | CC | Evaluator Competitor Communication |
| SuT | Technical Supervision | AvIA | Assistant Leader Evaluator |
| SuE | Structure Supervision | SePT | Test Project Selection |
| ChE | Team Chief | JPre | President Jury |
| CT | Technical Committee | DT | Technical Delegates |
| AvLi | Leade Evaluator | ChO | Workshop Chief |
| EgAv | Evaluators of Regional Departments | CoJ | Jury Commission |
| EqM | Assembly team | SuL | Leader Supervisor |
| CE | Closing Ceremony | TrasHo | Transportation to hotel |
| SAud | Audit Service | JPreLi | Leader President of the Jury |
| RPro | Test Reviewer | | |

| | |
|---|--|
| Lunch - 12 AM to 2 PM Dinner 6 PM to 8 PM | |
| ReuSAud | Audit System Meeting |
| ReuSelPro | Test Selection Meeting |
| ReuCT | Technical Committee Meeting |
| ReuChE | Team Chief Meeting |
| ReuCG | General Coordination Meeting |
| ReuAvLi | Leader Evaluator Meeting |
| ReuPJ | Jury President Meeting |
| MeCT | Member of the Technical Committee |
| Reu ES MF | Meeting at School SENAI Mariano Ferraz |
| Reu PC | Meeting at Convention Palace Anhembi |

| | | | | | | | | | | | | | | | | | |
|---------|------------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 4/11/2012 a 6/11/2012* | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Arrival - CoT, CIS, SGC | | | | | | | | | | | | | | | |
| | Wed 11/07/12 C-7 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Arrival - SuT, SuL, SE, ChO e AvLi | | | | | | | | | | | | | | | |
| | | Reu CoT, ChO, CIS, AvLi - (ES M F) | | | | | | | | | | | | | | | |
| | | Tras Ho | | | | | | | | | | | | | | | |
| 1st day | Thu 11/09/12 C-6 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Arrival - JPreLi | | | | | | | | | | | | | | | |
| | | Reu - CoT - AvLi - CIS - RPro - SGC - JPre | | | | | | | | | | | | | | | |
| | | Rooms assembly - SePT ES MF + Montagem Local da Competição (Anhembi) - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| 2nd day | Fri 11/09/12 C-5 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Arrival - EqAv e DT | | | | | | | | | | | | | | | |
| | | Reu - CoT - AvLi - CIS - RPro - SGC - JPre | | | | | | | | | | | | | | | |
| | | Rooms assembly - SePT ES MF + Competition Location Assembly (Anhembi) - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | |
|----------|------------------|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 3rd day | Sat 11/10/12 C-4 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Reu - CoT CoJ | | | | | | | | | | | | | | | |
| | | (SePT) CoT - AvLi - EqAv - CIS - RPro - SGC - JPre - JPreLi | | | | | | | | | | | | | | | |
| | | Competition Location Assembly (Anhembi) - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| 4th day | Sun 11/11/12 C-3 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Arrival of Delegations | | | | | | | | | | | | | | | |
| | | (SePT) CoT - AvLi - EqAv - CIS - RPro - SGC - JPre - JPreLi | | | | | | | | | | | | | | | |
| | | Competition Location Assembly (Anhembi) - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| 5th day | Mon 11/12/12 C-2 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Reu CoT+ChE | | | | | | | | | | | | | | | |
| | | PC Anhembi | | | | | | | | | | | | | | | |
| | | Opening ceremony | | | | | | | | | | | | | | | |
| | | Competition Location Assembly (Anhembi) - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| 6th day | Tue 13/11/12 C-1 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Reu CT | | | | | | | | | | | | | | | |
| | | Ambiance - C + AvLi + EqAv + AvLA + ChO | | | | | | | | | | | | | | | |
| 7th day | Wed 14/11/12 C-1 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | CC 1st Competition Day (Instructions 8 - 8:30 AM, Competition 8:30AM - 5 PM) | | | | | | | | | | | | | | | |
| | | CC | | | | | | | | | | | | | | | |
| | | ReuSAud | | | | | | | | | | | | | | | |
| | | Reu CT | | | | | | | | | | | | | | | |
| 8th day | Thu 11/15/12 C-2 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | CC 2nd Competition Day (Instructions 8 - 8:30 AM, Competition 8:30AM - 5 PM) | | | | | | | | | | | | | | | |
| | | CC | | | | | | | | | | | | | | | |
| | | ReuSAud | | | | | | | | | | | | | | | |
| | | Reu CT | | | | | | | | | | | | | | | |
| 9th day | Fri 11/16/12 C-3 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | CC 3rd Competition Day (Instructions 8 - 8:30 AM, Competition 8:30AM - 5 PM) | | | | | | | | | | | | | | | |
| | | CC | | | | | | | | | | | | | | | |
| | | ReuSAud | | | | | | | | | | | | | | | |
| | | Reu CT | | | | | | | | | | | | | | | |
| | | ReuCG/ChE | | | | | | | | | | | | | | | |
| 10th day | Sat 11/17/12 C-4 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | CC 4th Competition Day (Instructions 8 - 8:30 AM, Competition 8:30 - 4 PM) | | | | | | | | | | | | | | | |
| | | CC Embalagem das Ferramentas | | | | | | | | | | | | | | | |
| | | CC | | | | | | | | | | | | | | | |
| | | ReuSAud | | | | | | | | | | | | | | | |
| | | ReuCG/SAud | | | | | | | | | | | | | | | |
| | | Reu CT | | | | | | | | | | | | | | | |
| | | Disassembly - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| 11th day | Sun 11/18/12 C+1 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Free day - C | | | | | | | | | | | | | | | |
| | | Disassembly - Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| | | Reu CT | | | | | | | | | | | | | | | |
| | | Results homologation | | | | | | | | | | | | | | | |
| | | Closing Ceremony | | | | | | | | | | | | | | | |
| 12th day | Mon 19/11/12 C+2 | 07:00 | 08:00 | 09:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | 19:00 | 20:00 | 21:00 | 22:00 |
| | | Disassembly Cot, SuL, SuE, ChO, EqMo | | | | | | | | | | | | | | | |
| | | Return of delegations | | | | | | | | | | | | | | | |

PARALLEL EVENTS

The Knowledge Olympics 2012, in addition to the competitions, promote the following events.

- Confectionery World Tournament
- Inova Senai;
- Indústria do Futuro [Industry of the Future]
- Educação do Futuro [Education of the Future]
- National Seminary of Teachers of SENAI
- Exhibition of Movable Units (SESI / SENAI)
- Robotics Tournament - SESI
- Cyber Senai
- Sustainability

SPONSORS

The sponsoring companies contribute with financial sponsorship fees or give equipment to be used in competitions. After the Olympics, these equipment can be incorporated into SENAI school unit.

SENAI knows that the secret of success is the work together. So, is sponsored and has the support of major companies in organizing competitions regional, national and participation of the Brazilian team in international competitions.





SENAI

Brazilian National Service for Industrial Training

National Department

SBN - Q1 Bloco C - Edifício Roberto Simonsen

Brasília-DF

70040-903

(61) 3317-9001

www.senai.br

SENAI - São Paulo

Av. Paulista, 1313

São Paulo-SP

01311-923

(11) 3528-2000

www.sp.senai.br



CO-REALIZATION



REALIZATION



www.senaiolimpiadas.com.br