



Setting the Standard for Automation™

Students Sections. Overview

District 12 - District Leadership
Conference 2017

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Standards
Certification
Education & Training
Publishing
Conferences & Exhibits

What is an ISA Student Section?

An ISA Student Section is formed by a group of students who are interested in **Automation, Instrumentation and Control** and wish to improve their knowledge in the area having a close contact with the Industry



Benefits for Students and Universities



- Being part of a ISA Student Section offers the following benefits (1):
 - Close contact with the Industry, having access to subjects that are relevant to the professionals in this moment
 - Additional training for students to that already included in Universities and Technical institutions
 - Networking with professionals and other Student Sections
 - Opportunity to develop projects and practice I&C
 - Reduced fare to be ISA member (10 US\$/year)



Benefits for Students and Universities

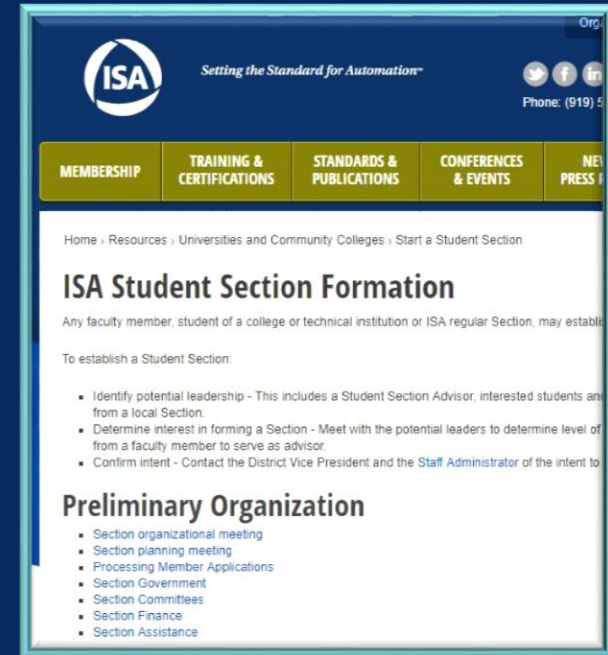


- Being part of a ISA Student Section offers the following benefits (2):
 - Reception of InTech magazine and access to publications discounts as well as the rest of benefits of ISA regular members, like having access to all ISA standards
 - A student grant is awarded each year for a member of a Student Section
 - Participation in European and worldwide contests for students
 - The year after graduation students can still have the reduced ISA fee for students
 - Being part of the Board of Directors of a Student Section is an excellent way to develop leadership and management skills for students. This may a be a good point in their CV

How to form a Student Section

- Any faculty member, student of a college or technical institution or ISA regular Section, may establish a Student Section
- A Student Section is formed by at least 14 members.
- Its Board of Directors is formed by a President, Vice-President, Secretary, Treasurer and additional chairs as required.
- A key person is the Advisor, a professor that helps in the formation and activities of the Student Section. Support from faculty is welcome.
- Additional information on requirements and procedures are in:

<https://www.isa.org/resources/universities-and-community-colleges/start-a-student-section/>



Support from ISA regular section

- ISA local regular (professional) section typically helps the Student Sections
- As an example let me show some of the benefits ISA Spain Section is offering the Spanish Student Sections (1):
 - Grants for training courses organized by ISA Spain (2 full grants and 2 partial ones)
 - Access to all ISA Spain Technical meetings
 - Two full grants to ISA Spain Master on Instrumentation and Control (590h)
 - National ISA Student Sections meeting (expenses paid by ISA Spain)



Support from ISA regular section

- Benefits ISA Spain Section is offering the Spanish Student Sections (2):
 - Budget to finance Student Sections activities considered worth it. Special financial help on the two first years of existence
 - Mentoring to help Student Section formation and regular activities by our two Student Section Liasons (they are part of the ISA Spain Executive Committee where they inform about Student activities and needs)
 - Professionals help students to organize training courses, visit to factories, etc.
 - Spain Students Contest and Award
 - Help to get scholarships in companies



ISA Spain training courses

- Training courses organized by ISA Spain in 2017 available to students (2-3 days):
 - Control Valves. Sizing and Selection
 - Big Data and Data Analytics in Industry
 - Safety Instrumented Systems (SIS) basic course
 - Functional Safety Expert and Certification exam
 - Process Analyzers

As an example



ISA Spain Technical Meetings

- Technical Meetings organized by ISA Spain in 2017 available to students (3 hours in the afternoon):
 - Collaborative and Sensitive Robotics
 - Evolution of DCS towards Industry 4.0
 - Industrial applications of Drones-RPAS
 - Energy Savings in Compressed Air Systems
 - Control Valves Problems
 - Mechatronics

As an example



ISA-Repsol Master of I&C

Reference course
for professionals

- For professionals and by professionals
- Scholarships available for Student Sections
- 590h. 11 weeks in classroom during 10 months
- Complete Instrumentation project to be developed
- Multiple simulations and real instruments available

Contents:

- **Fundamentals**
- **Measurement**
- **Control Valves**
- **Installation and Maintenance**
- **Engineering**
- **I&C in Hazardous Locations and SIS**
- **Basic Controls**
- **Control Systems**
- **Process Equipment Controls**
- **Energy Process Controls**
- **Multivariable Advanced Control**

Student Sections finance

- Each section has a different situation.
- Some alternatives for financing are:
 - Member fees (additional to those of ISA)
 - Financial help from University or Government (local or central)
 - Financial help from ISA regular section
 - Fees of Training courses or activities organized by the section
 - ...



Usual activities for Student Sections

- Usual activities for an ISA Student Section are:
 - Training Courses
 - Conferences
 - Visit to factories
 - Lab practices with real instruments
 - ...
 - Anything your imagination leads to



Key factors of Student Sections



- Students who are interested in developing their knowledge in Automation and contact with industry
- An Advisor who is committed to the section
- Year to year continuity is difficult and has to be prepared
- Support from local professional section

Q&A