Federal Network of Vocational, Scientific and Technological Education

An evolving innovation model
The National Council of the Federal Network of Vocational, Scientific and Technological Education (Conif) focuses on the development, presentation and improvement of vocational and technological training, including agricultural teaching, research, innovation and extension. Conif’s goals are to value, strengthen and consolidate its 41 member institutions - 38 Federal Institutes of Education, Science and Technology, 2 Federal Centers for Technological Education (Cefets), and the Pedro II School - spread over 568 municipalities in all Brazilian federative units.

Organizational Structure

Mission: To strengthen Federal Network institutions through political coordination and representation initiatives aimed at enhancing vocational, scientific and technological education that is public, free, high quality and socially approved.

Vision: Conif will be nationally and internationally recognized as an advocate for innovative and inclusive vocational, scientific and technological education.

Core values: Unity, Democratic Management, Sustainability, Equity, Transparency, Ethics, and Solidarity.

As an important driver of Brazil’s vocational and technological education model, Conif works in cooperation with several countries, including the Community of Portuguese Language Countries (CPLP). It is a partner of the Organization of Ibero-American States (OEI), and one of the representatives of the International Center for Technical and Vocational Education and Training (Unevoc) in Brazil.

The main actions in the international area are:
- Expanding academic, scientific and cultural cooperation
- Strengthening the integration of teaching, research, extension and internationalization
- Promoting mobility for staff and students
- Supporting the Federal Network’s internationalization process
- Identifying potential and strategic partners
- Organizing international missions
- Participating in good-practice exchange forums
- Strengthening South-South cooperation
- Promoting integration between the Federal Network and international vocational education institutions
- Encouraging the teaching of Portuguese as an Additional Language (PAL)
- Stimulating the development of a Federal Network language policy
- Consolidating vocational education in border areas
Due to its strong inclusive potential, the Federal Network of Vocational, Scientific and Technological Education offers state-of-the-art vocational training at different levels – from basic education to postgraduate studies. The focus on regional development and on citizenship awareness-raising is present in more than 9,000 courses aimed at meeting the needs of local productive arrangements and bringing together vocational education, applied research, innovation and technology transfer.

Currently, 38 Federal Institutes of Education, Science and Technology, 2 Federal Centers for Technological Education (Cefets) and the Pedro II School integrate the Federal Network. Together, these institutions total 644 campuses spread in rural and urban areas all over Brazil. They have around 1 million students and employ 70,000 people, including faculty members and technical-administrative staff.

The Federal Network was founded in 1909. Its centennial experience is based on a contemporary and interactive approach, always compatible with current demands. Since 2002, with the strengthening of its internationalization policies, the Federal Network’s practices and skills have spread around the globe. Currently, over 30 countries are engaged in cooperation with Brazilian institutions and experiencing its innovative and differentiated teaching model.
Innovative and unique vocational and technological education model
- Inclusive potential
- Incentives to creativity, innovation and a vision of the future
- High levels of technology transfer applied to products and processes through technological extension programs
- Courses focused on the needs of local productive arrangements
- Training professionals of excellence through citizenship awareness
- Encouraging capacity building for staff
- Strong internationalization policy
- Policies that are consistent with promoting applied research, innovation and capacity building
- Present at all vocational and technological education levels
- Fifty per cent of all places reserved for secondary level technical students
- At least 20% of all places allocated to teacher training
- Around 30% of all places reserved for technology, bachelor’s and engineering undergraduates, and for graduate students (master’s and doctorates)
- Administrative, financial and didactic-pedagogical autonomy

From elementary education to post-graduate studies, Federal Network institutions have a social commitment to offering free, public and state-of-the-art vocational education, including teacher training.

<table>
<thead>
<tr>
<th>LEVEL/QUALIFICATION</th>
<th>REQUIREMENTS</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stricto sensu</td>
<td>Undergraduate degree</td>
<td>2-4 years</td>
</tr>
<tr>
<td>Lato sensu</td>
<td>Undergraduate degree</td>
<td>1 year</td>
</tr>
<tr>
<td>Undergraduate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor’s degree</td>
<td>Secondary school diploma</td>
<td>4 years</td>
</tr>
<tr>
<td>Technologist</td>
<td>Secondary school diploma</td>
<td>2-3 years</td>
</tr>
<tr>
<td>Engineering</td>
<td>Secondary school diploma</td>
<td>5 years</td>
</tr>
<tr>
<td>Teaching degree</td>
<td>Secondary school diploma</td>
<td>4 years</td>
</tr>
<tr>
<td>Teaching License</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stricto sensu</td>
<td>Middle school certificate</td>
<td>3-4 years</td>
</tr>
<tr>
<td>Lato sensu</td>
<td>Secondary school diploma</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Technical</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Integrated</td>
<td>Middle school certificate</td>
<td>3-4 years</td>
</tr>
<tr>
<td>Postsan</td>
<td>Secondary school diploma</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Technical</td>
<td>Middle school certificate</td>
<td>3 years</td>
</tr>
<tr>
<td>Initial and continued education</td>
<td>Elementary school certificate</td>
<td>up to 2 years</td>
</tr>
</tbody>
</table>

Focused on raising workers’ professional skills and schooling levels.
Enable institutions to go beyond the teaching environment and bring their research to society, sharing knowledge and changing lives.

Scientific journals contribute to developing research in vocational and technological education.

Promote the improvement of products, services and processes, and thus, enable studies to be effectively implemented.

The Federal Network promotes activities that contribute to the expansion of knowledge all over Brazil.

Most of the Federal Network’s Master’s and Doctoral programs are professionally-focused, so as to meet the needs of local productive arrangements.

In face-to-face and long-distance programs.

The number of articles published in 2016 grew around 21% compared to 2015.

Over the past three years, the Federal Network saw a significant increase in the number of patents filed. While in 2015 only 25 requests were filed, in 2016 this number grew to 75.

38,906 faculty members, and 32,863 technical-administrative staff.

34,538

71,769

8,114

110

435

778,686

5,979

11,028

FILED PATENTS

PUBLICATIONS

APPLIED RESEARCH PROJECTS

TECHNOLOGICAL EXTENSION PROJECTS

POST-GRADUATION PROGRAMS

STUDENTS ENROLLED

SCIENTIFIC JOURNALS

TECHNICAL-SCIENTIFIC EVENTS

STAFF

FEDERAL NETWORK FACTS AND FIGURES
In order to increase Brazil's industrial competitiveness and productivity, the Federal Network has five Innovation Hubs that focus on the development of applied research, and will create several others starting in 2018. These units are formed by laboratories operated in partnership with the Brazilian Agency for Industrial Research and Innovation (Embrapii).

Projects are carried out by students, teachers, industry professionals and researchers in Brazil and around the world.
Federal Network institutions have partnerships with over 30 countries, developing specific projects such as capacity building programs for staff, research enhancement, and cultural and academic exchange programs. Thus, in cooperation with the world, Brazil promotes higher quality vocational education by sharing knowledge and good practices.
Acre  www.ifac.edu.br
Alagoas www.ifal.edu.br
Amapá www.ifap.edu.br
Amazonas www.ifam.edu.br
Bahia www.ifba.edu.br
Baiano www.ifbaiano.edu.br
Brasília www.ifb.edu.br
Catarinense www.ifc.edu.br
Ceará www.ifce.edu.br
Cefet - Minas Gerais www.cefetmg.br
Minas Gerais www.ifmg.edu.br
Cefet - Rio de Janeiro www.cefet-rj.br
Colégio Pedro II (RJ) www.cpi2.rj.br
Espírito Santo www.ifes.edu.br
Farroupilha www.ifsfarroupilha.edu.br
Fluminense www.ifl.edu.br
Goiás www.ifgoias.edu.br
Mato Grosso www.ifmt.edu.br
Mato Grosso do Sul www.ifms.edu.br
Maranhão www.ifma.edu.br
Roraima www.ifrr.edu.br
Norte de Minas www.ifmig.edu.br
Pará www.ifpa.edu.br
Paraíba www.ifpb.edu.br
Paraná www.ifpr.edu.br
Pernambuco www.ifpe.edu.br
Piauí www.ifpi.edu.br
Rio de Janeiro www.ifrj.edu.br
Rio Grande do Norte www.ifrn.edu.br
Rio Grande do Sul www.ifrs.edu.br
Rondônia www.ifro.edu.br
Santa Catarina www.ifsc.edu.br
São Paulo www.ifsp.edu.br
Sergipe www.ifrs.edu.br
Sertão Pernambucano www.ifserpao-pe.edu.br
Sudeste de Minas Gerais www.ifsmg.edu.br
Sul de Minas Gerais www.ifsmgominas.edu.br
Sul-rio-grandense www.ifsr.edu.br
Tocantins www.ifto.edu.br
Triângulo Mineiro www.ifm.edu.br