



# Fiche de poste

**Fonctions: Junior Professor Chair CIDEXT** 

Typical job or profession: Teacher-researcher in higher education

### **General Information**

Catégory: A

Status (permanent, non-permanent, open): non-permanent

**Contract length:** 4 years. Following an evaluation of the candidate's scientific merit and professional aptitude by a tenure committee, the position may lead to a permanent appointment as *Professeur des Universités*.

Specialization: Industrial Systems Engineering

Corresponding CNU sections: 60 - Mechanical engineering, civil engineering

61 - Computer engineering, automation and signal processing

Contract and job title: Inventive Design from Data and its Transdisciplinary Exploitation (CIDEXT)

Research budget available over 4 years :

Total Package ANR	200 000€
Co-financing (Chaire AIARD)	50 000 €

Quota: full-time

## **Appointment**

Administrative: INSA Strasbourg

Department or platform: Shared knowledge

Geographical: INSA Strasbourg / 24 boulevard de la Victoire / 67084 Strasbourg Cedex

# **INSA Strasbourg**

Strasbourg's Institut National des Sciences Appliquées (INSA) is a public scientific, cultural and professional institution. It hosts approximately 2,000 engineering and architecture students on its Esplanade campus, located near the city center.

It employs 280 permanent and contract staff.

Its missions are to

- initial training of engineers and architects, scientific and technological research, continuing education of engineers and technicians, dissemination of scientific and technical culture. INSA Strasbourg offers:
- 7 engineering specialties: civil engineering, surveying, electrical engineering, mechanical engineering, plastics processing, mechatronics, thermal engineering, energy and environment.
- 6 apprenticeship programs (FIP, FISA)
- 1 architect training course

On January 1, 2013, INSA Strasbourg took on extended responsibilities and competencies.

INSA has set up a system to combat psycho-social risks (RPS), which focuses on 3 areas: preventing risks, detecting them, acting on them and dealing with them.

INSA Strasbourg has also implemented measures to address sexist, sexual, homophobic, and transphobic violence

Last but not least, INSA Strasbourg has set up a professional equality plan to demonstrate its determination to move resolutely towards real equality between men and women.

INSA has been awarded the HRS4R label (European human resources strategy for researchers) since March 15, 2022.

The school has access to the nearby CROUS (Centre régional des œuvres universitaires et scolaires) canteen and sports facilities on the Alsace site, as well as to university libraries.

As part of its policy in favor of sustainable development, INSA contributes to the financing of soft mobility for its staff (reimbursement of 50% of the cost of public transport and a sustainable mobility package (bicycle, carpooling, shared mobility services, etc.)).





Eligible employees can also telework, in accordance with the rules laid down by the school's governing bodies.

#### **CSIP Team**

The project will be hosted within the CSIP (Information System Design and Inventive Processes) team, which is part of the Industrial Engineering field.

Its core research theme is the formalization and development of the design processes for sociotechnical products and systems within the context of digital transformation. This theme is broken down into three areas of work: knowledge, information and artifacts, at both strategic and operational levels. Its areas of expertise are:

- inventive design,
- information and production systems engineering
- and sustainable development.

The position is also part of the Savoirs en Commun department.

The CIDEXT project is fully in line with INSA Strasbourg's ambitious strategy to reinforce its role as a leader in technological innovation. By placing inventive design at the heart of its priorities, the school is promoting a strategic area of research supported by the ICube laboratory and its CSIP team, renowned for its work on advanced methodologies. CIDEXT illustrates INSA's determination to combine academic excellence with industrial partnerships to meet today's technological challenges.

#### **Missions**

#### Main mission:

The transversality of the position, attached to the Savoirs en Commun department, will enable the school's departments to be federated around the R&D 4.0 theme, while supporting the modernization of design approaches. The person recruited will have to help integrate these advances into collaborative projects, while strengthening INSA Strasbourg's position as a key player in innovation at national and international level.

He/she will apply the principles of inventive design (rooted in TRIZ theory) to collaborative projects, leading to the emergence of innovative solutions adapted to modern challenges. In addition, he/she will play a key role in bringing together information sciences and engineering sciences. By engaging in cross-disciplinary initiatives, the candidate will contribute to establishing ICube as a leader in the technological research landscape.

### Main activities:

### Research:

The CIDEXT project modernizes inventive design practices by exploiting digital tools and data from technology intelligence. The aim is to structure the knowledge available to optimize the inventive phases of industrial and scientific projects. CIDEXT will develop transdisciplinary methodologies integrating advanced analyses of patents, scientific publications and technical data.

This framework will enable us to produce targeted states of the art, direct solutions towards high value-added applications, and develop collaborative platforms. CIDEXT is thus positioned as a flagship project in the field of innovation, fostering synergies between academic research and industrial needs.

# Teaching:

The teaching project associated with the CIDEXT Chair aims to raise awareness among students and teachers of R&D 4.0 practices, while reinforcing the integration of tool-based innovation into curricula. The incumbent will train students in the analysis and exploitation of patents and scientific publications, introducing them to techniques derived from inventive design research. These approaches will be applied to academic and industrial projects with strong innovation potential and requiring thorough scientific and technical monitoring.

This position will also help to modernize teaching practices through the use of collaborative digital tools, while fostering links between teaching and industrial needs. The incumbent will also play a key role in developing specific modules promoting INSA Strasbourg within the ECIU network. Finally, continuing education programs for professionals will reinforce the attractiveness and impact of the school's programs.





# Special conditions of employment:

Supervision: Yes (doctoral students, master's students, and final-year engineering projects)

Project management: yes

Travel: yes

Compensation: €3,443.50 gross per month

## Skills

## Knowledge:

- Research and innovation policy
- Disciplinary field: mechanical engineering; computer engineering; industrial systems engineering
- Practical knowledge in the disciplines taught
- Legal and ethical framework
- Research investigation methods
- Organization of higher education

#### Know-how:

- Apply scientific investigation and documentation techniques
- Design educational tools
- Public speaking (French and English)
- Work as part of a team
- Use activity-specific software
- Initiate and manage partnerships

#### Personal skills:

- · Autonomy, self-control and self-confidence
- · Strong organizational skills and stress management abilities
- Creativity and sense of innovation
- Rigor and reliability
- Critical thinking skills
- Capacity for conceptualization and intellectual curiosity
- Interpersonal skills

### **Profile Requirements**

# Level of studies (with possible specification of specialization):

Hold a PhD or, failing that, have university diplomas, qualifications and titles equivalent to a PhD, awarded by the Scientific Advisory Board meeting in restricted formation.

#### Recommended experience:

At least three years of postdoctoral scientific activity. For candidates with a French PhD, at least two years of international mobility and experience in establishing research partnerships are strongly recommended.

Language (and level required): must be able to teach in English and French.

# **Application and Follow-up**

Vacancy date: from September 1, 2025

Publication date: June 6, 2025

# Elements of the application:

- > Copy of identity document, diplomas and qualifications,
- Curriculum vitae with presentation of work
- Letter of motivation
- > Any other relevant documents





# Application address:

Applications must be submitted through the Galaxie platform (ODYSSEE module). Only shortlisted candi will be invited to the interview.

The application is open to candidates from June 11, 2025 to July 11, 2025 at 4pm.

Contact person for information about the position: denis.cavallucci@insa-strasbourg.fr