

Les métiers de l'ingénieur

Research engineers in France: overview

Employer

CNRS = **I**TA

University = B**I**ATSS or **I**TRF

*A stands for administrative staff, I'll focus on **I***

Expertise

called BAP: branche d'activité
professionnelle

- BAP E: computing
- BAP C: instrumentation

See [Référentiel des métiers IT](#)

The job

- Engineers support research in the broad sense
- Research engineers can take responsibilities, coordinate big projects
- They are involved in all the stages of the research activities:
 - design, realization, valorization, diffusion
- The job is linked to a technical expertise (BAP), and people can move from one to another scientific context
- Whereas researcher job is linked to a personal/innovative scientific project
- Evaluation is done at the local level at first order (lab director), for researcher it's a national committee

Competition at CNRS

- Jobs are advertised on **June, 1st**. Applications due to mid-July. Hearings in the fall (starting date = December, 1st)
- [Candidate guide](#)
 - diploma: Master degree, école d'ingénieur, phd (gives a 2 years bonus)
 - no nationality condition (but application and hearing in French)
- 300 positions per year, incl. 36 in BAP C IR, 20 in BAP E IR, ~3 to 5 in astro
- Applications: CV + cover letter, tuned for each position
- Jury: 2 experts (from the BAP), 1 representative of the lab who is impartial wrt all candidates, 1 representative of the elected staff, sometimes 1 representative of HR, 1 president chairing the jury
- Rules wrt parity, institute diversity, geographical diversity

Competition at University

- Jobs advertised in **March**. Applications due to end of April. Hearings in the spring (starting date = September, 1st)
- [Candidate guide](#)
- 1000 positions per year, incl. 12 in BAP C IR, 49 in BAP E IR
- Application: activity report (2 pages) -> you need to print it and send it by postal route
- Before hearing, you need to upload your CV + cover letter
- Jury:
 - one for selecting the application: president, 3 to 4 experts + some others
 - one for the hearing: president, at least one experts, at least 2 are not from the lab which is recruiting
 - idem: parity rules, geographical rules etc

Advices for the hearing

- 10 min for a presentation + 20 min of questions / answers (35 min for BIATSS)
- Hearing has a coefficient of 3 (application's coefficient is 1)
- Presentation should cover:
 - professional career
 - expertises illustrated by realizations
 - professional project : short term / long term
- Usual questions focus on
 - technical aspects to measure the level of expertise
 - experience with team work : colleagues, upper hierarchy, management (students)
 - project management
 - what in 20 years from now ?
- Questions can be brutal because time is limited, and equity rules enforce the need for covering all evaluation items for all candidates

Careers

- Salary is around ~2k€* / month at the beginning (just like a researcher).
- People are encouraged to move: another lab, or even institute (yearly call)
- At IN2P3, people are encouraged to get their HDR and have PhD students
- You have the possibility to teach if you like
- Careers at the IR level are very diverse, depending on the lab environment, or even team environment, and on personal taste or capabilities
- CNRS supports expertise network (réseau métier) at the national level
- From the lab point of view:
 - any input to HCERES report is good to have: publications, HDR, software, general public books etc
 - responsibilities in international project require the sense of service and some level of solidarity

**a bit more at the university*