CERN: the World Lab for fundamental research
CERN : aerial view from Jura mountain

Established in 1954 as international research organization.
‘Science for peace’ one of the original mottos
Funded by 21 European states
One of the fastest circuits on the planet ...

ATLAS: As tall as a 5 story building

CMS: as heavy as the Eiffel tower
1973: discovery weak force neutral currents

1983: W & Z boson discovery

July 4, 2012: Higgs boson discovery

1994: nature has 3 particle families
Who works at CERN?

- CERN employs approx. 2500 people
  - physicists, engineers, technicians
  - administrators, secretaries, etc.

- More than 11,000 visiting scientists come to CERN for their research
  - representing 570 universities and over 60 nationalities

Largest non-European users community: USA (~1800 researchers)
A unique work environment

- Forefront of technology and physics
- Multicultural and multidisciplinary teams
- Supervision by experts in their technical domain
- A dynamic environment with training opportunities
- An opportunity to make valuable and long-lasting contacts from all over Europe
- A bi-lingual organization (English and French)
Technology at CERN

- Computing/IT
- Vacuum & cryogenics
- Electronics
- Electricity
- Magnets
- Mechanics
- Material Science
- Radiofrequency
- Control Systems

Examples:
- WWW HTML invented in 1991
- LHC Vacuum technology reused in Hydrothermal electricity generation
- Accelerator and photon detectors developed for medical application
- Electronics custom development reuse
Fellowship program

140-160 positions/year

FIELDS: physics, engineering, computing

ELIGIBILITY: BSc, MSc or PhD
no more than 10 years relevant post-MSc experience

Selection: 2 selection committees per year
Features: 2-3 year employment contract
attractive salary incl. social benefits
training possibilities

Fellows are normally nationals of the Member States of CERN.
On average we have 10% of Fellows from non-Member States.

For application deadlines
Check the Job tab at http://public.web.cern.ch/public/
For university graduates

Marie Curie program

Fields: physics, engineering, computing
Duration: up to 3 years
Eligibility: MSc or PhD
  ≤5 years post-degree experience
Features: funded by the European Commission
  an employment contract with CERN
  specific Marie-Curie vacancies published on CERN web pages
  an attractive salary, social benefits, allowances
  international network

Open to all nationalities
126 Marie Curie Fellows (20% NMS)
Presently at CERN (51 Cofunds)

https://www.cern.ch
Technical & Administrative Students program

120-140 positions/year

FIELDS: applied physics, engineering, computing

LENGTH: 4 to 12 months

ELIGIBILITY: 18 months of technical undergraduate studies

FEATURES:
- a technical project with a CERN supervisor
- a living allowance, incl. health insurance

Primarily addressed to CERN members states applicants

For application deadlines
Check the Job tab at
http://public.web.cern.ch/public/

https://www.cern.ch
Doctoral Student program

40-50 positions/year

FIELDS: applied physics, engineering, computing
LENGTH: 1-3 years
ELIGIBILITY: enrolled in a doctoral program in a Member State university
FEATURES: a technical project, leading to a PhD thesis co-supervised by the university thesis advisor and a CERN staff member, a living allowance incl. Health insurance

For application deadlines
Check the Job tab at http://public.web.cern.ch/public/

Typically meant for Member states applicants
Summer Students program

~250 positions/year

FIELDS: physics, engineering, computing
ELIGIBILITY: 3 years of full-time studies at university level
LENGTH: 8 to 13 weeks, during the summer
FEATURES: high-quality lecture programs, visits and workshops, living allowance, accommodation in CERN hostel

For application deadlines
Check the Job tab at http://public.web.cern.ch/public/

2/5 of studentships are for non member states
CERN: a European gateway
Before 1980 High Energy Physics was a male dominated environment: things have improved substantially

In the last 15 years the % of women in PhD programs has been stable between 20 and 25%, and CERN hiring statistics indicate that the chances of a woman to get a job at CERN is equal if not higher to the one of men

Study done over ~800 students who graduated with the DELPHI experiment.

Similar trends observed in Europe for IT and engineering