CERN

#### Accelerator Operator

#### **Requesting Unit**

Beam Department – Operations Group (BE-OP)

#### **Associated Benchmark Job**

Accelerator/Industrial Process Operations Technician

# Grade

3 or 4

# Job description

### Introduction

Are you qualified in physics, computing, electronics, electricity or electro-mechanics? Are you at the start of your career in a technical or scientific environment? We invite you to take your career to an exciting new level by joining the team of operators who run the CERN accelerator complex in the CERN Control Center (CCC). Join Team CCC! CERN, take part!

The <u>Operations Group</u> is responsible for the operation of the entire CERN accelerator complex and its technical infrastructure, including the Large Hadron Collider (LHC), running a varied proton, antiproton and heavy ion experimental programme. You will be at the heart of the preparation of particle beams for the varied physics programs at CERN.

#### **Functions**

As an operator you will:

- Be part of the 24/7 shift team which runs CERN's accelerator complex.
- Oversee the operation of one of our accelerators and the beam lines to the associated experimental facilities on a shift basis, ensuring the application of safety rules.
- Work closely with accelerator physicists to setup and optimize the accelerator operation.
- Outside periods of shifts, and after a training period, you will participate in software or hardware related development and maintenance for one or more of the accelerators in the complex, either under the supervision of an engineer or physicist within the OP group or within the framework of a specialized equipment group in the department.
- Outside periods of accelerator operation, assist the technical infrastructure team with the operation of CERN's technical infrastructure, if required.

# Qualifications

Higher technical diploma in the field of physics, computing, electronics, electricity or electro-mechanics, or equivalent.

### Experience

The experience required for this post is:

- o Initial work experience in a technical or scientific environment;
- Experience in the field of physics, computing, electronics, electricity or electro-mechanics;
- The following would be an advantage:
  - Experience in the field of software engineering in a modern development language environment (e.g. JAVA and/or Python);
  - Experience in the field of operating large facilities and their associated hardware (e.g. measurement devices, power converter techniques, vacuum equipment, PLCs, work in controlled radiation areas, etc.).

## **Technical competencies**

The technical competencies required or to be acquired for this post are:

• Operation of accelerators.

- $\circ$   $\;$  Analysis and optimization of accelerator performance.
- Operation and maintenance of electromechanical equipment and systems.
- Knowledge of programming techniques and languages: knowledge of JAVA and/or Python would be an asset.

### **Behavioural competencies**

The behavioural competencies required for this post are:

- Solving problems: finding the information needed to solve problems; making objective judgments based on all the facts available.
- Managing self: working well autonomously, taking on activities and tasks without prompting;
- Communicating effectively: ensuring that information, procedures and decisions are appropriately documented;
- Working in teams: working well in groups and readily fitting into a team; participating fully and taking an active role in team activities.
- o Demonstrating flexibility: adapting quickly and resourcefully to shifting priorities and requirements.

### Language skills

Spoken and written English or French: ability to draw up technical texts in one of the two languages, as well as ability to understand and speak the other language in professional contexts. A willingness to learn the other language rapidly.

# Additional information

## Eligibility and closing date:

<u>Diversity</u> has been an integral part of CERN's mission since its foundation and is an established value of the Organization. Employing a diverse workforce is central to our success. We welcome applications from all Member States

and Associate Member States.

This vacancy will be filled as soon as possible, and applications should normally reach us no later than (tbc).

### **Employment Conditions**

Contract type: Limited duration contract 5 years. Subject to certain conditions, holders of limited-duration contracts may apply for an indefinite contract.

What kind of special conditions (working hours, work environment) are required by the functions (tick the **appropriate boxes**)? This means that chosen conditions will apply in a regular basis for this job.

	SPECIAL CONDITIONS WHICH ARE REQUIRED IN A REGULAR BASIS
х	Shift work, including nights, Sundays and official holidays.
	Participation in a regular stand-by duty, including nights, Sundays and public holidays.
	Work during nights, Sundays and public holidays.
х	Work in radiation controlled areas.
х	Interventions in underground installations.
х	A valid driving license.

What kind of special conditions may be required in the future **depending on the needs of the Organization (tick the appropriate boxes**)? Please note: the use of these standard phrases is an exception and needs to be justified by the hiring manager, for example by an anticipated future reorganization of work implying special working conditions due to departures, absences etc. This means that chosen conditions can apply (or not) at certain circumstances, as something exceptional during the length of the contract.

<b>SPECIAL CONDITIONS WHICH MAY BE REQUIRED DEPENDING ON THE NEEDS OF THE ORGANIZATION IN THE FUTURE</b>
Shift work

Stand-by duty
Work during nights, Sundays and official holidays
Work in radiation controlled areas
Interventions in underground installations