



**INTERSHIP POSITION FOR STUDENTS
IN SWITZERLAND
AT CEMEX INNOVATION HOLDING**



**INTERSHIP POSITION IN COMPUTER SCIENCE/COMPUTER
ENGINEERING/INFORMATION TECHNOLOGY/INFORMATION SYSTEMS**

DATE: From the 12th of February 2024 to the 31st of January 2025

AREA WHERE THE STUDENT WILL PERFORM THE INTERNSHIP: Global Research and Development Department.

POSITION PURPOSE:

Global Research and Development Department is a core team inside CEMEX Innovation Holding. The aim of the team involves research and development of new products and solutions for the different challenges that CEMEX has as a key global corporation in the construction industry, as well as specialized technical troubleshooting for all CEMEX operations, mainly: Cement, Concrete, Aggregates, Admixtures and other Building Construction Products.

PROJECT TO BE DEVELOPED: Construction 4.0: BIM tools Development.

ACTIVITIES:

- Design and create tools (software plug-in/web) for CEMEX digital platform to enlarge and enhance User Experience.
- Interface with current transactional systems such as SAP and CEMEX GO.
- Audit current IT BIM solutions and enrich the data protection system.
- Data analysis, machine learning and deep learning techniques, aimed at qualitative and quantitative characterization of concrete.
- Database and server management.

DELIVERABLES / OUTCOMES:

- The student will generate valuable skills in implementing IT solutions for engineering software by enabling CEMEX BIM solution.
- Evaluate IT solutions through Customer feedback management
- Understand BIM method working principles
- Proposal and validation of data protection system.
- Dual development of BIM platform in professional software and web environments.

CHALLENGES:

The student will deal with a stimulating and dynamic environment, he/she will work on a relevant topic in the construction field by applying the Building Information Modeling (BIM) methodology within the Architectural, Engineering and Construction Industry.



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INTERNSHIP POSITION IN CHEMISTRY/CHEMICAL ENGINEERING

DATE: From the 12th of February 2024 to the 31st of January 2025

AREA WITHIN THE COMPANY THE STUDENT WILL PERFORM HIS INTERNSHIP: Global Operations and Technology department (GO&T)

NAME OF THE PROJECT: Analytical Reliability Program (ARE)

POSITION PURPOSE:

The Global Operations and Technology department (GO&T) is a core team inside CEMEX INNOVATION HOLDING AG based in Switzerland. The GO&T team handles and / or supports all production technology related projects of the company worldwide. Its mandate is two folded: On one hand it provides high level support to all CEMEX cement operations worldwide for the design and deployment of novel collaboration practices and knowledge management tools, and on the other, it is responsible to propose and develop new materials and technologies and to provide insight and evaluation of available technologies with regards to the relevancy to the company.

PROJECT ACTIVITIES:

- Support the coordination and preparation of the laboratory reliability assessments according to the Analytical Reliability (ARE) program results to achieve higher reliability in our laboratories.
- Support the coordination of an execution action plan with the program representatives, to ensure integral problem solving within the cement plants.
- Perform remote Analytical Reliability (ARE) assessments to improve overall performance.
- Propose actions to be followed by the operations and its completion.

STAFF INVOLVED:

Researchers and Manager from the Cemex Global Research Laboratory and the entire GO&T department

REGION THAT WILL BE SUPPORTED: Worldwide



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THE CORPORATION:

CEMEX (www.cemex.com) is a leading sustainable construction materials and solutions company with innovation and sustainability at its core working to create value for its stakeholders. We deliver high-quality products and services that exceed our customers' expectations through our vertically integrated approach to production and distribution, combined with our expertise in cement, ready-mix concrete, aggregates, and urbanization solutions.

Cemex's global presence is strategically positioned across the Americas, the Caribbean, Europe, Africa, the Middle East, and Asia. Its global trading network encompasses close to 100 countries within the portfolio of its four core businesses.

CEMEX INNOVATION HOLDING:

Established as CEMEX's Global Research Center in 2001 and located in Brügg, Berne, Switzerland, it aims to ensure CEMEX's industry leadership and strong market position by developing innovative technological, engineering and business solutions for the continuous growth of CEMEX, as the leader in the building materials industry across the globe.

Its human capital is comprised of multidisciplinary backgrounds from research scientists to engineers, business professionals and commercialization experts representing 26 nationalities. It also has partnerships with a Network of leading research institutions and universities in Switzerland and the rest of the world.

INTERNSHIP COMPENSATIONS:

a) Academic

The student can use the topic of his research internship experience to write his thesis after the conclusion of his internship and together with his thesis advisors, can also publish an article on a refereed journal.

b) Economic

A monthly Gross salary of 2,475 Swiss Francs/month will be paid if the student is enrolled in a bachelor's program, 2,885 Swiss Francs/month if enrolled in a master's program, or 3,600 Swiss Francs/month if in a PhD track.

DOCUMENTS REQUIRED FOR APPLICATION:

- Personal CV
- Personal letter of Motivation

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