

Summer Internship Program

Apply before November 7th

Hydro offers various internship positions across business areas in Norway. This year we are recruiting over 50 interns for the summer of 2022.

An internship in Hydro is a great way for you to try out and learn more about your field of study. You will be obtaining a valuable experience and you get to tackle relevant tasks and real challenges, with support from experienced colleagues. You will also get to participate in a joint program with all the Hydro interns, allowing you to learn more about our business and acquire interdisciplinary knowledge. All the while, we expect and want you to have a fun experience during the summer.

The Internship Program:

Summer Internship in Hydro

- 8 weeks (mid. June to mid. August)
- Theory into practice
- Real tasks and challenges
- Dedicated buddy/mentor
- A taste of a potential career

Common program with all interns

- Two-day Introduction Program
- Plant Visit / Excursion
- Social Events
- Group Case Assignment
- Closing Event



Summer Internship Positions - Engineering and technology

Apply before November 7th

Position title	No. of positions	Location	Category
Energy Power Production	2	Sogn	Engineering / Technology
Maintenance Management	1	Sunndal	Engineering / Technology
Technology and Operational Support, Electrolysis	2	Årdal	Engineering / Technology
Technology and Operational Support, Cell Design	2	Årdal	Engineering / Technology
Casthouse	1	Årdal	Engineering / Technology
Carbon	2	Årdal	Engineering / Technology
Technology and Operational Support, Carbon	1	Årdal	Engineering / Technology
Electrolysis	1	Årdal	Engineering / Technology
Technical Unit, Projects	1	Årdal	Engineering / Technology
Projects, Electrolysis	3	Husnes	Engineering / Technology
Energy Power Operations	2	Nesflaten	Engineering / Technology
Energy Power Systems, Grid & Concessions	1	Oslo	Engineering / Technology
Technology and Operational Support, Asset Management	1	Oslo	Engineering / Technology
Hydro Batteries	2	Oslo	Engineering / Technology
Energy Projects	2	Oslo	Engineering / Technology
Energy Strategy & Policy	2	Oslo	Engineering / Technology



Summer Internship Positions - IT

Apply before November 7th

Position title	No. of position	Location s	Category
Energy Markets, Operations & Settlement	1	Rjukan	IT
Energy Power Operations	1	Stavanger	IT
Technology and Operational Support, Digital Production	2	Årdal	IT
Industrial IT	1	Karmøy	IT
Group IT & Digital, Cyber Security	1	Oslo	IT
Recycling, Operational Performance	2	Oslo	IT



Summer Internship Positions – Business, Economics & Analytics

Apply before November 7th

Position title	No. of positions	Location	Category
Finance, Global Process Design and Improvement	1	Oslo	Business, Economics & Analytics
Group Treasury and Tax, Asset Management	1	Oslo	Business, Economics & Analytics
Energy Risk Management	1	Oslo	Business, Economics & Analytics
Group Performance, Planning and Controlling	1	Oslo	Business, Economics & Analytics
Energy Markets	2	Oslo	Business, Economics & Analytics
Marketing and Communication	1	Oslo	Business, Economics & Analytics
Aluminium Metal Business Systems (Lean)	2	Oslo	Business, Economics & Analytics
Metal Sourcing & Trading	1	Oslo	Business, Economics & Analytics
Corporate Development	2	Oslo	Business, Economics & Analytics
Commercial	1	Oslo	Business, Economics & Analytics
Hydro REIN	1	Oslo	Business, Economics & Analytics
Hydrogen	2	Oslo	Business, Economics & Analytics



Job descriptions Summer Internship Positions 2022

Energy Power Production - Sogn



Apply at hydro.com/internship2022

No. of positions: 2

About the department

Hydro har i dag 22 egne vannkraftverk i Norge, med total normalproduksjon på 10 TWh. Disse kraftverkene ligger i områdene Røldal-Suldal, Sogn, Telemark og Vennesla. I tillegg styrer og overvåker vi fem kraftverk for andre, samt at vi er operatør av Tonstad vindpark.

Hydro Energi Sogn eier og drifter 6 kraftverk lokalisert i Indre Sogn. Kraftverkene ligger i Årdal og Luster kommune og er en betydelig energiprodusent. Hydro Energi Sogn har 26 fast ansatte og 2 lærlinger med kontorsted i Øvre Årdal og Fortun.

Area of responsibility

Stillingen vil bli lagt under drift og vedlikeholdsstøtte og oppgaven vil være å dokumentere tilsyn på våre vannkraftsinstallasjoner primært i reguleringsområdet. Dette gjelder dam og bekkeinntak mm. Andre oppgaver relatert til anleggene kan også bli aktuelt.

Education

- Civil and Environmental Engineering / Bygg og miljøteknikk
- Energy and Environmental Engineering / Energi og miljø

Specific skills / competencies

Gode holdninger til helse, miljø og sikkerhet Ettersom all dokumentasjon fra tilsyn rapporteres på norsk, er det ønskelig at kandidaten har gode norskkunnskaper.

Additional information

Stillingen innebærer mye feltarbeid i reguleringsområdet der en må kunne bevege seg over større avstander til fots, i båt og til noen av installasjonene i helikopter. Dette er i nærområdene til nasjonalparkene i Vest Jotunheimen som for den rette person er en glimrende anledning til å få sett fantastiske fjellområder. Arbeidet er svært lærerikt der en får sett konstruksjonene som samler vann til kraftstasjonene. Arbeidet er i lag med kvalifisert tilsynspersonell og oppgavene rundt tilsyn er en lovpålagt oppgave nedfelt i damsikkerhetsloven som blir forvaltet av Norges Vassdrags og Energidirektorat (NVE).

Maintenance Management - Sunndal



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Maintenance is performed according to plans i our Maintenance Management System, SAP. All kind of mechanical and electrical equipment, also included vehicles in our production departments are covered. All together we have 4 production departments, Carbon, Electrolysis, Casthouse and department for production og electrical power, pressurized air and cooling water. Maintenance department also do minor projects and improvement together with operations. In addition to our common maintenance center, each production department have their own maintenance organization, all together 60 operators. Engineers perform analysis and improvement based on data collected from SAP. Continuous improvement of first line maintenance and preventive maintenance to increase reliability and control cost is part of the work. New technology in Industry 4.0 to be utilized to be able to detect degradation in an earlier stage. As a Summer Intern you will be able to work with different parts of the maintenance organization.

Area of responsibility

The task(s) will be customized to the candidates' competence and profile. The summer intern(s) will be part of a team with buddy and other relevant resources. Typically, the work assignments include a theoretical and practical part (at test center and/or smelter) to get a close insight on our work processes.

For 2022 we are looking for support in the following main areas:

- Analyze maintenance data and suggest/improve preventive maintenance
- Improvement work with root cause analysis for «top ten» equipment
- Suggest use of industry 4.0 technology to improve data and better prediction of technical condition

Education

- Cybernetics and Robotics / Kybernetikk og robotikk
- Electric Power Engineering / Electric Power Engineering
- Mechanical Engineering / Produktutvikling og produksjon
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

- RAMS
- Programming skills: Python
- Ability to combine theory with industrial challenges
- Ability to work independently, show initiative and is a good team player

Additional information

The tasks will be conducted in close collaboration with plants and travelling to plants will be considered. Strong language skills are an advantage (Norwegian, English). You will be working in an international team of both experienced professionals and other interns (if possible) also across units.

Technology and Operational Support, Electrolysis - Årdal



Apply at hydro.com/internship2022

No. of positions: 2

About the department

The Technology and Operational Support (TOS) unit is part of Hydro's Aluminium Metal business area and consists of around 190 employees within eight units across six locations in Norway and Germany. The main task of TOS is to support all commercial and operational units in accelerating Aluminium Metal's profitability and sustainability agenda in the short and medium term - while having longer term technology development as a core activity.

IOS Electrolysis develops systems and technologies for improved productivity in our aluminium reduction plants.

Area of responsibility

Analytics and process control of electrolysis cells.

Education

- Cybernetics and Robotics / Kybernetikk og robotikk
- Applied Physics and Mathematics / Fysikk og matematikk
- Chemical Engineering and Biotechnology / Industriell kjemi og bioteknologi
- Materials Science and Engineering / Materialteknologi
- Nanotechnology / Nanoteknologi

Specific skills / competencies

- Interested in analytics
- General programming skills
- Ability to combine theory with real world challenges

Additional information

The work will done in close collaboration with operations.

Technology and Operational Support, Cell Design -



Apply at hydro.com/internship2022

No. of positions: 2

About the department

The Technology and Operational Support (TOS) unit is part of Hydro's Aluminium Metal business area and consists of around 190 employees within eight units across six locations in Norway and Germany. The main task of TOS is to support all commercial and operational units in implementing and accelerating Primary Metal's profitability and sustainability agenda in the short and medium term - while having longer term technology development as a core activity.

The Technology Development team develops and supports aluminium electrolysis technology to secure efficiency, safety and optimal performance, and that implements new technology at Hydro's smelters in Norway and abroad.

Area of responsibility

The task(s) will be customized to the candidates' competence and profile. The summer intern(s) will be part of a team with buddy and other relevant resources. Typically, the work assignments include a theoretical and practical part (at test center and/or smelter) to get a close insight on our work processes.

For 2022 we are looking for support in the following main areas:

- Model development of new applications and tools
- Follow-up of selected technology and production parameters to improve performance
- Measurements/instrumentation, data analysis, statistics, visualization and dashboards

Education

- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Applied Physics and Mathematics / Fysikk og matematikk
- Chemical Engineering and Biotechnology / Industriell kjemi og bioteknologi
- Materials Science and Engineering / Materialteknologi
- Mechanical Engineering / Produktutvikling og produksjon

Specific skills / competencies

- Interested in analytics, mathematical modelling or other physical processes
- Programming skills: Python
- Ability to combine theory with industrial challenges
- Ability to work independently, show initiative and is a good team player
- Fluent in English

Additional information

The tasks will be conducted in close collaboration with plants and travelling to plants will be considered. Strong language skills are an advantage (Norwegian, English). You will be working in an international team of both experienced professionals and other interns (if possible) also across units.

Casthouse - Årdal



Apply at hydro.com/internship2022

No. of positions: 1

About the department

The foundry alloy and sheet ingot casthouses in Årdal produce around 220 000 tons of semi-finished products per year. Foundry alloys are commonly used in car parts such as wheels, engine and suspension parts, and structural components, whereas sheet ingots are used to produce foil, plates for offset-print, building and construction and automotive industry.

Area of responsibility

As a summer intern in Casthouse you will analyze and improve scrap rate through big data and scrap rate analytics.

Education

- Cybernetics and Robotics / Kybernetikk og robotikk
- Materials Science and Engineering / Materialteknologi

Carbon - Årdal



Apply at hydro.com/internship2022

No. of positions: 2

About the department

Årdal Carbon produces around 210 000 tons of anodes per year and are supplied to the electrolysis in Karmøy KTP, Sunndal, Høyanger and Årdal. Electrolysis operation strongly depends on a stable / predictable anode quality. We are working with continuous improvement in production processes, building up superior operator knowledge / experience, establishing pro-active and predictive maintenance, aiming for the best HSE.

Area of responsibility

- Follow up of selected maintenance and production parameters
- Statistics data handling and visualization
- Cooperation with operators, technology and the IT department

Education

- Computer Science / Datateknologi
- Engineering and ICT / Ingeniørvitenskap og IKT
- Materials Science and Engineering / Materialteknologi
- Mechanical Engineering / Produktutvikling og produksjon
- Embedded Computing Systems
- Electronic Systems Design and Innovation / Elektronisk systemdesign og innovasjon

Specific skills / competencies

- Knowledge and experiences with an analytical program (e.g. Python, excel, Power BI)
- Knowledge of PLC programming

Additional information

The project will be adjusted based on the competence and qualities of the selected intern. The intern will have a large degree of influence when it comes to execution of the project (within the scope of the project). You will be working close to anode production and will get firsthand and in depth look into this process.

Technology and Operational Support, Carbon - Årdal



Apply at hydro.com/internship2022

No. of positions: 1

About the department

he Technology and Operational Support (TOS) unit is part of Hydro's Primary Metal business area and consists of around 180 employees within eight units across six locations in Norway and Germany. The main task of TOS is to support all commercial and operational units in accelerating Primary Metal's profitability and sustainability agenda in the short and medium term - while having longer term technology development as a core activity.

Area of responsibility

The Carbon team supports the Hydro's sustainability and improvement agenda through process optimization and technology development. Material technology, digital development, laboratory analyses methodology, process technology, environment and modelling are main subject areas.

Education

- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Chemical Engineering and Biotechnology / Industriell kjemi og bioteknologi
- Materials Science and Engineering / Materialteknologi
- Mechanical Engineering / Produktutvikling og produksjon
- Nanotechnology / Nanoteknologi

Specific skills / competencies

Knowledge and experiences with an analytical program (e.g. Python, excel, Power BI)

Additional information

The TOS Carbon intern will be part of an experienced engineer team working in close cooperation with operations and universities.

Electrolysis - Årdal



Apply at hydro.com/internship2022

No. of positions: 1

About the department

The electrolysis in Årdal produces 200 000 tonnes of primary aluminium annually and has about 180 employees. We are working with continuous improvement in all production processes on a everyday basis, upgrading our operator knowledge base, establishing a pro-active approach increasing the performance of our pot lines.

Area of responsibility

As a summer intern in the Electrolysis department, you will mainly work with tasks related to energy consumption and emissions (CO2). The tasks will be a combination of measurements in the pot room and analytic work.

Education

Materials Science and Engineering / Materialteknologi

Specific skills / competencies

- Proficient in Excel and PowerPoint
- Good IT skills are an advantage

Technical unit, projects - Årdal



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Årdal Metallverk, Teknisk enhet - Prosjektavdeling er ansvarlig for prosjekter og teknisk støtte til driftsenhetene ved Årdal Metallverk. Årlig gjennomføres 80-90 større om mindre prosjekter i Årdal og omtrent halvparten av disse er teknisk prosjekter som ledes av prosjektavdelingen. I tillegg deltar avdelingen I ulike forprosjekt og bistår med teknisk kompetanse i ulike sammenhenger.

Area of responsibility

Deltagelse i forstudier og prosjekter ved prosjektavdeling ved Årdal Metallverk. Endelig prioritering av prosjekter for 2022 blir gjort i desember 2021. Denne prioriteringen, samt kandidatenes bakgrunn og interesse vil definere aktuelle oppgaver. Avdelingen ønsker å styrke sin mekaniske kompetanse, men kompetanse inne prosjektstyring er også relevant.

Viktige stikkord for det vi ønsker er:

- · Generell mekanisk ingeniør kompetanse
- Kreativitet og evnene til å utfordre eksisterende «sannheter»
- Evne til å konkretisere problemfremstillinger til tekniske løsninger / spesifikasjoner
- Analytisk, selvstendig, samarbeidsevne

Education

Mechanical Engineering / Produktutvikling og produksjon

Projects, Electrolysis - Husnes



Apply at hydro.com/internship2022

No. of positions: 3

About the department

Hydro Husnes har ca. 340 ansatte og ligger lokalisert ytterst i Hardangerfjorden. Hydro Husnes har gjennom de siste årene foretatt investeringer på ca. 2 milliarder kroner for å modernisere anlegget og doble produksjonen til 200 000 tonn Aluminium.

Elektrolyse avdelingen har 112 fast ansatte. Bemanningen er fordelt på 5 skift, stab og en dagtidsgruppe. I forbindelsen med nyinvesteringene er vi nå inne i en fase med stabilisering og kompetanseheving, samt innkjøring av nye system og utstyr.

Staben har 6 Fagledere som jobber med oppfølging og optimalisering av driften.

Area of responsibility

I forbindelse med moderniseringen har vi potensialer til å optimalisere både utstyr og prosess. I den forbindelse har vi behov for kandidater som kan jobbe både selvstendig og sammen med andre personer i organisasjonen. Gode samarbeidsegenskaper og evne til systematisk arbeid vil komme godt med. Vi kan tilby spennende prosjektoppgaver relatert mot drift. Temaene vil inneholde tema som utslipp, miljø, energibesparelse, prosessforbedringer mm.

Før man starter på prosjektoppgavene vil man få en introduksjon til produksjonen ved å delta i drift/på skift. Man vil få en «fadder» som vil hjelpe til med en eller flere driftsrelaterte prosjekter, som vil innebære målinger i felt, analysearbeid, vurdering av resultat og forslag til forbedringer.

Education

- Applied Physics and Mathematics / Fysikk og matematikk
- Chemical Engineering and Biotechnology / Industriell kjemi og bioteknologi
- Energy and Environmental Engineering / Energi og miljø
- Materials Science and Engineering / Materialteknologi
- Mechanical Engineering / Produktutvikling og produksjon

Specific skills / competencies

Matlab, Python mm.

Energy Power Operations - Nesflaten



Apply at hydro.com/internship2022

No. of positions: 2

About the department

Røldal-Suldal is a hydropower production area, consisting of 9 power plants and 16 reservoirs with a yearly production of ~3 TWH. Our department consist of 25 employees in two departments; maintenance and Projects and Technical Support.

Area of responsibility

Areas of responsibility will include evaluation and risk analysis of our facilities in the production area in terms of safety for other people. This will include inspections of both dams, intakes and water tunnel gates to map findings.

Education

- Electric Power Engineering / Electric Power Engineering
- Civil and Environmental Engineering / Bygg og miljøteknikk
- Energy and Environmental Engineering / Energi og miljø
- Mechanical Engineering / Produktutvikling og produksjon
- Safety, Health and Environment / Helse, miljø og sikkerhet

Specific skills / competencies

- Excel
- Physical ability to walk/get around in mountain areas

Additional information

In this position you will get to experience one of the greatest mountain areas in Norway.

Energy Power Systems, Grid & Concessions - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Hydro's business area Energy is responsible for safe and efficient operations of Hydro's power plants in Norway. Strong value creation from our power production and sourcing competitive energy to Hydro's smelters are key drivers for Hydro's future growth.

Area of responsibility

As an intern in Power Systems, Grid & Concessions, you will conduct analyzes regarding power systems, grid issues and security of supply for the largest industrial plants of Hydro. You will also provide grid and high voltage expertise to new businesses as wind, solar and offshore wind. In addition to the above mentioned, you will have the opportunity to dive into relevant grid technologies.

Education

- Electric Power Engineering / Electric Power Engineering
- Energy and Environmental Engineering / Energi og miljø
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

- Excel analytics
- Quantitative mindset
- PowerPoint

Technology and Operational Support, Asset Management - Oslo Apply at hydro.com/internship2022



No. of positions: 1

About the department

The department own and develop the digitals solution within Asset Management for Hydro Aluminum Metal. We have over several years developed a Digital Maintenance Toolbox: an integrated cloud-based solution for asset performance and continuous monitoring. We also support and develop the use of our Maintenance Management System SAP PM. In recent years there has been several important changes, implementing SAP S4/Hana, mobile solutions for technicians, new user interfaces (Fiori) and integration with other elements in the Digital Maintenance Toolbox. We use SAP PM across several Business Areas and are a part of a network developing this further for our 2500 users.

Area of responsibility

- Develop models for asset optimization
- Develop digital solutions for condition monitoring and anomaly detection

Education

- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Electric Power Engineering / Electric Power Engineering
- Information Systems
- Mechanical Engineering / Produktutvikling og produksjon

Specific skills / competencies

Grafana, Azure and similar.

Hydro Batteries - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

Batteries is an active industrial owner and developer of businesses along the battery value chain. Our current assets include the Bergenbased world leader in marine battery systems, Corvus Energy, the successful Swedish battery startup, Northvolt, and Norway-based Norway-based battery recycler, Hydrovolt. We also have significant business development projects like the Joint Battery Initiative with Equinor and Panasonic.

Area of responsibility

The specific tasks and responsibilities will depend on which projects that require help at the time, but typical tasks could be industry analyses, business case building, technical/economic project analyses, or R&D project support.

Education

- Logistics, Supply Chain Management
- Cybernetics and Robotics / Kybernetikk og robotikk
- Chemical Engineering and Biotechnology / Industriell kjemi og bioteknologi
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

Analytic mindset and ability to be self-driven as well as collaborative.

Additional information

The batteries team is a flat and dynamic team, and all team members are actively involved in idea generation and decision making. We work partially physically in Oslo, but with several team members located elsewhere collaborating digitally. We are a purpose-driven and engaged team that look very much forward to working with young professionals.

Energy Projects - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

Hydro Projects is an organization with decades of experience from investment projects of various sizes and complexity, within aluminium, energy, oil & gas, agriculture and petrochemical.

Projects has a Centre of Excellence function for project management in Hydro. Dedicated resources provide competence and support to Hydro's project managers and teams, In addition, our organization provides training in project management and facilitate project management networks across the BAs.

Area of responsibility

Adapt tools and methods to users needs and work with digitalization and service design of Hydro's project management toolbox.

Education

- Management of Technology / Ledelse av teknologi
- Human Resouces / Org. Phycology
- Communication Technology / Kommunikasjonsteknologi
- Information Systems
- Industrial Design / Industriell design
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

The ability to see and seek new solutions to assist in the digitalization of a largely paper based toolbox and project management handbook.

Additional information

Projects delivers project management of investment projects and offers support in early phase projects and studies. The internship will give insights into project management of different types of projects as well as the opportunity to work in a diverse and highly competent environment.

Energy Strategy & Policy - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

(1 position as energy analyst, 1 position as sustainability analyst)

About the department

Hydro's business area Energy is responsible for safe and efficient operations of Hydro's power plants in Norway, Hydro's energy sourcing globally as well as developing Hydro Energy's business area for future positioning. The Energy Strategy & Policy unit is responsible for long term analysis of the energy complex in a Nordic, European and global context, for mapping regulatory development in the energy space and formulating Hydro's energy policy positions, as well as driving the strategic and sustainability agenda for the Energy business Area.

Area of responsibility

As an intern in Energy Strategy & Policy, you will conduct analysis and modelling of energy markets and/or analysis related to the energy policy and sustainability agenda (environment, biodiversity, social responsibility);

- Quantitative analysis / modelling of energy markets
- Quantitative analysis as support for policy positions and sustainability monitoring and -programs
- Information search and mapping as support for specified analysis

Education

- Economics / Samfunnsøkonomi
- Financial Economics / Financial økonomi
- Economics and Business Administration / Økonomi og administrasjon
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse
- Energy and/or environmental (Miljø & Energi eller Industriell Økologi) studies
- Biology and environmental science

Specific skills / competencies

- Quantitative mindset
- Good analytical skills
- Knowledge of digital tools such as Excel, PowerPoint is necessary
- Good communication skills
- Modelling competence and Power BI required/preferred

Additional information

The department engages actively across Hydro Energy's value chain and strategic processes. We are looking for summer interns who have the ability to convert analytical skills to value-enhancing strategies, and with an interest in energy markets and sustainability.

Energy Markets, Operations & Settlement - Rjukan



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Operations & Settlement is responsible for balancing the power portfolio in Norway and in Germany. The portfolio includes power plants in Norway and power consumption in Germany. The power prognosis is established and nominated towards the Transmission System Operator (TSO) and balanced towards the power exchanges in Norway and Germany aiming to minimize balancing risk by minimizing deviation between prognosis and real consumption. Monthly settlement is operated for the energy portfolio. Data management and flow is handled in specified systems.

Area of responsibility

Previous internship projects have included programming a consumption prognosis model, programming automatic monitoring of trades to warn of potential market manipulation, the creation of PowerBI reports and small robots to automate previously manual tasks.

Education

- Economics and Business Administration / Økonomi og administrasjon
- Management of Technology / Ledelse av teknologi
- Computer Science / Datateknologi
- Electronic Systems Design and Innovation / Elektronisk systemdesign og innovasjon

Specific skills / competencies

Python, Modelling, Power BI, Excel

Energy Power Operations - Stavanger



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Hydro Energi Stavanger operates the hydro powerplants for Lyse Kraft DA and Jørpeland Kraft AS. 13 powerplants in total. The plants are situated in mid Rogaland, and the office facilities are situated at Gausel, between Stavanger and Sandnes. Hydro Energi took over as operator 1.1.2021.

Area of responsibility

The position concerns digitalization of plant documentation in the documentation system (SAP DMS). This requires accuracy and knowledge about building and machine documentation. The goal is to have a as complete digital archive as possible, that is easy to use, and where necessary documentation can be found fast. Typical tasks:

- Scanning of documentation
- Tagging documentation with correct metadata in SAP DMS
- Quality check of available documentation on site, inside power plants, hatch buildings etc.

Education

- Mechanical Engineering / Produktutvikling og produksjon
- Electric Power Engineering / Electric Power Engineering
- Information Systems
- Civil and Environmental Engineering / Bygg og miljøteknikk

Specific skills / competencies

- Ability to work independently, show initiative and is a good team player
- SAP skills would be preferable

Additional information

The work will mainly be done from our office at Gausel, but some travelling to the plants can be necessary.

Technology and Operational Support, Digital Production - Årdal



Apply at hydro.com/internship2022

No. of positions: 2

About the department

The Technology and Operational Support (TOS) unit is part of Hydro's Primary Metal business area and consists of around 190 employees within eight units across six locations in Norway and Germany. The main task of TOS is to support all commercial and operational units in accelerating Primary Metal's profitability and sustainability agenda in the short and medium term - while having longer term technology development as a core activity.

TOS Digital Production Support is providing IT products and services to Primary Metal in many areas from Manufacturing Execution Systems to Cloud services for data storage and analytics, together with a number of project activities covering data capture, analytics, machine learning and digital twins.

Area of responsibility

SI's will be organized as a project team together with buddy and other relevant resources and be responsible for planning and executing sprints and milestones following agile methodology.

Education

- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Informatics / Informatikk
- Information Systems
- Engineering and ICT / Ingeniørvitenskap og IKT
- Information Security / Information Security
- Embedded Computing Systems

Specific skills / competencies

Programming in one or more of the following: Java, Phyton, C/C++, Angular

Additional information

The project tasks will be related to analyzing, designing and developing a prototype for a business need related to our production processes. The tasks might be tailored to the specific background/competence of the SI's.

Industrial IT - Karmøy



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Hydro Karmøy er en av verdens ledende aluminiumprodusenter, og har som ambisjon å produsere verdens mest energieffektive aluminium. Hydro Karmøy har rundt 700 ansatte.

Hydro Aluminium, Karmøy Metal Plant (KMV) har i dag 2 produksjonslinjer for elektrolyse, 2 støperier og 2 anodemontasjeenheter. En av elektrolyselinjene er KTP, (Karmøy Technology Pilot project) som benytter Hydros nyeste, mest effektive og mest miljøvennlige teknologi.

Vår IT-avdeling er ansvarlige for å betjene alle enheter innen KMV med applikasjoner for prosesskontroll (24/7), kontorapplikasjoner/brukerstøtte og infrastruktur (servere, nettverk, databaser m.m.). Vi er fagansvarlige for IT/OT-området på fabrikken og deltar derfor mye i prosjekter, både innen tradisjonell IT og i automasjon/automatiseringsprosjekter.

Area of responsibility

Arbeidsoppgavene vil kunne tilpasses kandidatens kompetanse og ønsker. Mulige arbeidsområder:

- Feasibility Study
- Programmering og utvikling av våre applikasjoner og komponenter innen automasjon (PLS/PLC, OPC, HMI/SCADA, visualisering/Ignition)
- Driftsoptimalisering (databasedrift (MS SQL og Oracle), PLS/PLC, OPC, HMI/SCADA
- Forbedringsarbeid

Education

- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Engineering and ICT / Ingeniørvitenskap og IKT

Specific skills / competencies

- Python
- MS SQL
- Oracle

Group IT & Digital, Cyber Security – Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Group IT and Digital owns the Cyber Security strategy for the Hydro Group, and with the Cyber & Compliance team managing the Cyber Security for the company.

Area of responsibility

You will be part of the CISOs team and work on an assignment to help Hydro improve its Cyber Security Capability. The exact scope for the assignment will be developed in dialogue with the intern closer to startup.

Education

Information Security / Information Security

Specific skills / competencies

- Knowledge of Information Security frameworks (ISO27001) and Information Risk Analysis methodology
- Basic competence on good security practices for networks, industrial control systems, applications & systems
- Competence on Office365 tools (SharePoint, Word, Excel, PowerPoint)
- Knowledge with Microsoft Azure (cloud platform with services) is an advantage, including programming tools and analytics tools available in that platform

Additional information

By joining the CISO's team you will get the firsthand experience with a Cyber Security function in a global industrial environment and help shape the defenses against the attackers!

Recycling, Operational Performance - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

The business unit Recycling is running Primary Metal's recycling activities covering seven recycling casthouses and one scrap processing plant in six countries. These assets are procuring scrap raw materials and are converting this into value-added products, developing av recycling growth portfolio. Our new green product Circal 75R, based on recycling of at least 75% recycled post-consumer scrap, is produced by the BU.

Area of responsibility

The position will work on tasks related to:

- Improving asset reliability and performance
- Setting up and improving visualization tools for production and performance management
- Performing in-depth analysis of operational and business performance

Education

- Communication Technology / Kommunikasjonsteknologi
- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Informatics / Informatikk

- Information Systems
- Engineering and ICT / Ingeniørvitenskap og IKT
- Information Security / Information Security
- Applied Physics and Mathematics / Fysikk og matematikk
- Chemical Engineering and Biotechnology / Industriell kjemi og bioteknologi
- Industrial Design / Industriell design
- Materials Science and Engineering / Materialteknologi
- Mechanical Engineering / Produktutvikling og produksjon
- Nanotechnology / Nanoteknologi
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse
- Electronic Systems and Instrumentation
- Electronic Systems Design and Innovation / Elektronisk systemdesign og innovasjon

Specific skills / competencies

Advanced skills in excel and programming (i.e. Python) will be an advantage.

Additional information

Some travelling within Europe may take place during the internship.

Finance, Global Process Design and Improvement -



Apply at hydro.com/internship2022

No. of positions: 1

About the department

BS Finance is a global financial service provider for Hydro, with hubs in North America, Latin America, Europe and India. Best practice accounting processes are developed based on market leading tools and deployed and further innovated through the Global Process Design and Improvement (GPDI) team. GBS Finance is working in close collaboration with Business areas, IT teams and Group functions to meet current and future Business needs and improve the end-to-end processes together.

Area of responsibility

You will be a part of the ongoing projects in the GPDI team to harmonize and automate accounting processes and use the new insight from analytics and process mining tools, dashboards and benchmarking reports to achieve cost savings and look for further improvements.

Education

- Financial Economics / Financial økonomi
- Economics and Business Administration / Økonomi og administrasjon
- Accounting and auditing / Regnskap og revisjon
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse
- Electronic Systems Design and Innovation / Elektronisk systemdesign og innovasjon

Specific skills / competencies

The candidate we are looking for has good analytical and communication skills and is eager to learn new IT tools.

Relevant tools for the ongoing project portfolio are SAP, SAC (SAP Analytic Cloud), SAP Fiori Apps, Celonis, PowerBI, Blackline, ServiceNow and Excel. Necessary training will be given for the relevant tools to be used by the candidate.

Group Treasury and Tax, Asset Management - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

The Asset Management team ("AM") manages the financial assets of the two Hydro related entities, Norsk Hydros Pensjonskasse and Industriforsikring AS. AM has frequent review meetings and discussions with several asset managers, banks and brokers in Norway and abroad about fund investments and developments in the financial markets. The operations include sales and purchases of financial securities, transaction registration and handling and management reporting. AM is organised in a legal entity, Hydro Kapitalforvaltning AS, and operates under a concession from the Financial Supervisory Authority of Norway.

Area of responsibility

We are looking for a person with strong Microsoft Excel skills, and the ability and drive to work efficiently to contribute to improving and developing asset management reports and analysis. This includes:

 Design, configure and test / implement new reports in a portfolio management and reporting system to improve the quality and automatization of reports

- Prepare additional analyses of data from reports in the portfolio management system in Excel Prepare graphs and other overlay presentations based on reports from the portfolio management system
- Further simplify and improve content and presentations in reports and increase efficiency of production

Education

- Financial Economics / Financial økonomi
- Economics and Business Administration / Økonomi og administrasjon
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

- Strong interest for financial markets and products
- Ability to work independently and show initiative
- Strong knowledge of Microsoft Office, especially Excel
- Good knowledge of analytical and structured IT systems and solutions

Additional information

You will be introduced to several aspets of Asset Management in an international and ambitious work environment. The tasks to be solved will be linked to the unit's daily work and contribute to making its operations more efficient. We encourage females to apply for this position.

Energy Risk Management - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

The Energy business area has three main tasks: To produce electric power in an efficient and market-optimized way; to assist Hydro's global operations with cost-efficient energy solutions; to realize new business opportunities for Hydro in energy technology.

Risk Management has the overall responsibility for measuring and monitoring Hydro's risk exposures related to the hedging and trading activities. Covering the Energy division's activities in gas, power, CO2 and green certificates in the Nordics, continental Europe and Brazil. Risk Management is also responsible for compliance, ensuring that the activities are aligned with laws and regulations but also ensuring the operation to be compliant with the company's code of conduct and corporate governance. In addition, Risk Management is also developing risk analysis and risk measures to support the decision-making process in projects and commercial operations.

Area of responsibility

The intern will be responsible for executing an improvement project within the risk management area. Previous internship projects have included robotics and automated reporting in Power BI/Azure.

Education

- Financial Economics / Financial økonomi
- Computer Science / Datateknologi
- Cybernetics and Robotics / Kybernetikk og robotikk
- Informatics / Informatikk

Specific skills / competencies

Modelling (R), Power BI, Databases

Additional information

As an intern in Risk Management, you will be part of the team in Oslo and included in the daily processes executed by the team. You will obtain valuable experience and understanding of Energy Risk Management and insight into commodity trading.

Group Performance, Planning and Controlling - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

GPPC is responsible for Hydro's performance management, enterprise risk management, business planning and capital allocation processes, as well as follow-up of all corporate staffs. The team's purpose is to drive the company's performance and to support key decision makers in a way that enables to achieve a full market valuation and create value for shareholders. The team is also responsible for establishing consistent methodologies and clear guidelines for the whole Hydro Group, driving process improvements and efficiency across Hydro.

A big part of the responsibilities is to drive digital transformation, structure data in databases and develop tools/solutions in order to improve efficiency and automation of the existing processes. Enable efficient "live" management reporting.

Area of responsibility

- Drive digital development to improve the controlling and reporting process incl databases, dashboards and automation of manual processes
- Analyze and understand Hydro's financial development and outlook
- Analyze, challenge and follow up key processes/activities in the business areas
- Improve Hydro's consolidated financial model
- Participate in a wide range of improvement projects

Education

- Economics / Samfunnsøkonomi
- Financial Economics / Finansiell økonomi
- Economics and Business Administration / Økonomi og administrasjon
- Computer Science / Datateknologi
- Applied Physics and Mathematics / Fysikk og matematikk
- Industrial Economics and Technology Management / Industriell Økonomiog Teknologiledelse

Specific skills / competencies

- Good analytical and modeling skills; programing skills preferred but not mandatory
- Experience with Excel and PowerPoint
- Experience with Business intelligence tools (e.g. Power BI)
- Proficiency in business English (written and verbal)
- We are looking for a candidate who shows curiosity, willingness to learn, drive to contribute and can work well independently

Additional information

his position is an excellent opportunity to gain a broad understanding of Hydro's business areas and key value drivers. You will also apply quantitative and financial modeling skills to develop tools and reports to improve the efficiency and automation in Hydro. This position is ideal for a candidate interested in both finance and development of digital tools and solutions.

Energy Markets - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

The Energy business area has three main tasks: To produce electric power in an efficient and market-optimized way; to assist Hydro's global operations with cost-efficient energy solutions; to realize new business opportunities for Hydro in energy technology. Today, Hydro has 22 hydropower plants in Norway, with normal production of 10 TWh per year.

Energy Markets manages Hydro's overall power portfolio of equity power production, long-term power agreements for Hydro's industry activities and market-based power contracts.

Area of responsibility

Automatization and digitalization of the processes in Energy Markets is a great focus in the years to come. This will result in many interesting projects, combining skills within quantative analysis, programming and commercial energy knowledge.

Education

- Financial Economics / Financial økonomi
- Computer Science / Datateknologi
- Electric Power Engineering / Electric Power Engineering
- Applied Physics and Mathematics / Fysikk og matematikk
- Energy and Environmental Engineering / Energi og miljø
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

- R / Python
- Quantitative analysis
- Commercial understanding
- Modelling

Marketing and Communication - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

The internship will be a cross functional role between Hydro's corporate brand and marketing team and the communication team in our aluminium extrusions business area. Our role is to make Hydro known for what we do in the 40 countries where operate through marketing and communication.

Area of responsibility

The intern will be in close contact with our international team of marketing and communication experts and together with them produce content to be published through our owned channels and possibly also paid advertising. This will give good insight into our business and how we work to keep and acquire new customers through B2B marketing and communication.

Education

- Economics / Samfunnsøkonomi
- Economics and Business Administration / Økonomi og administrasjon
- International Business and Marketing / Internasjonal forretningsdrift og markedsføring
- Communication Technology / Kommunikasjonsteknologi

Specific skills / competencies

Experience or interest in the field of communication and marketing management, social media experience, creative skills and fluent in English, both written and oral.

Additional information

This is an opportunity to get insight into how a multinational B2B company works to target specific audience groups through marketing and communication to offer our expertise and sustainable aluminium solutions. The candidate will get insight into many industries, the numerous exiting customers we work with and how we work with branding and marketing to differentiate our products to our competition.

Aluminium Metal Business Systems (Lean) - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

The TOS, AMBS, QA&MoC department do improvement projects, facilitate improvements and supports building of competence in quality work and lean/six sigma. The department is an agent for change in the sense that we support our customer organizations to prepare and adapt to improvement initiatives, both technological as well as organizational.

Area of responsibility

Improvement projects, predominantly linked to critical business processes within Aluminium Metal business area.

Education

- Management of Technology / Ledelse av teknologi
- Logistics, Supply Chain Management
- Engineering and ICT / Ingeniørvitenskap og IKT
- Industrial Design / Industriell design
- Materials Science and Engineering / Materialteknologi

Specific skills / competencies

Generally no specific tools, but good knowledge of mainstream business related computer systems is a necessity.

Metal Sourcing & Trading - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Metal Sourcing & Trading (MST) is a business unit within Primary Metal Commercial and is responsible for the optimization of the Hydro's global standard ingot portfolio and the management of LME price risk exposure on behalf of the company. The group consists of two trading departments, risk department, finance department and contract administration department. Trading results are reported on MST's bottom line. We are looking for a Summer Intern with keen interest in financial and commodity markets.

Area of responsibility

- Build analytical tools for trading, risk and portfolio management
- Development and testing of technical trading models
- Robotics & automation in trading and risk
- Market and industry analysis

Education

- Financial Economics / Financial økonomi
- Engineering and ICT / Ingeniørvitenskap og IKT
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

- Interest in financial markets
- Experience in statistical modelling and programming
- Quantitative skill set

Additional information

This internship offers a fantastic introduction to an actual global commodity trading division. Real-time decisions have direct impact. We operate with a short lead time between idea and testing.

Corporate Development - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

Corporate Development is responsible for driving Hydro's strategic agenda within profitability and sustainability. It comprises of three main areas; Technology Office, Sustainability, and Portfolio Development. The team is made up of approximately 30 members mainly based at Vækerø. The department provides guidance to top management regarding Hydro's portfolio as a whole and works with topics of key strategic importance, such as long-term sustainability goals, business development, market analysis, technology enablement.

Area of responsibility

Interns will work on a single project or portfolio of projects across Corporate Development's focus areas. Such projects could be within areas such as strategy, sustainability, macro-analysis, business development, or addressing a dilemma in the intersection of any number of the above.

Education

- Economics / Samfunnsøkonomi
- Financial Economics / Financial økonomi
- Economics and Business Administration / Økonomi og administrasjon
- International Business and Marketing / Internasjonal forretningsdrift og markedsføring
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

Corporate Development is the newest Business Area within Hydro and was established in 2019 to unite competence and knowledge to deliver on our ambitions within innovation, sustainability, and profitability.

Commercial - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Hydro Aluminium Metal Commercial is responsible for develop and manage a robust and long-term market position for ~3 mio t aluminium. AM Commercial is a global sales organization handling sale, marketing, service, R&D, logistics and hedging in Aluminium Metal.

Area of responsibility

Using analytics skills in combination with IT knowledge to improve Commercials reporting and business modelling.

We want to improve on a few areas with high level of structured data with potential to improve on automatic reporting and modelling. During this time the intern will work across different units in commercial, learning several topics from global metal sourcing modelling to credit reporting improvements, whilst having the freedom to improve our systems.

Education

- Financial Economics / Financial økonomi
- Economics and Business Administration / Økonomi og administrasjon
- International Business and Marketing / Internasjonal forretningsdrift og markedsføring
- Management of Technology / Ledelse av teknologi
- Communication Technology / Kommunikasjonsteknologi
- Computer Science / Datateknologi
- Informatics / Informatikk
- Information Systems
- Engineering and ICT / Ingeniørvitenskap og IKT
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Specific skills / competencies

- Proactive and solution oriented
- Structured with strong analytical skills
- Experienced with MS Excel and Power BI modelling
- Familiar with SQL-queries
- Knowledge of python (pandas, numpy) a plus, however not mandatory

Additional information

- Wide range of improvement area
- Global networking possibilities
- Diverse department

Hydro REIN - Oslo



Apply at hydro.com/internship2022

No. of positions: 1

About the department

Hydro REIN offers tailored energy solutions to industries: both on behind-the-meter energy efficiency, batteries etc - and green sourcing from large scale renewable power plants which we build and operate in partnership with developers and constructors in Brazil and the Nordics.

Within REIN, the Projects team is in charge of developing and executing these projects - according to budget, timeline and Hydro REIN standards.

Area of responsibility

The position will be supporting the Projects team with some of the tasks required for Projects coordination. It could be with an overview of market prices and stakeholders in the solar and wind turbines manufacturing players, could be help to optimize and implement project reporting tools, or supporting project managers in their individual tasks to follow up some of the projects in execution.

Education

 Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse

Additional information

Hydro REIN is a start up like entity, building a new organization with a new business model leveraging Hydro's existing resources and competences. This is an exciting opportunity to build and shape an organization.

Hydrogen - Oslo



Apply at hydro.com/internship2022

No. of positions: 2

About the department

As part of our new strategic direction to diversify and explore new growth opportunities, Hydro has established a new company to focus on hydrogen. Hydro Hydrogen offers renewable hydrogen solutions to help bring the world to net-zero emissions. We will develop, construct and operate green hydrogen facilities, serving sectors that are hard to decarbonize. Renewable based hydrogen can fuel heavy industries, shipping and long-distance transport.

Area of responsibility

- Be integrated into the opportunity screening team to perform market and commercial analysis of Hydrogen project development opportunities, including
- Gather market intelligence and analyze potential regional hydrogen demand
- Perform value chain analysis
- Develop cost comparison models and benchmarking data
- Perform prospect and market sensitivities

Education

- Economics / Samfunnsøkonomi
- International Business and Marketing / Internasjonal forretningsdrift og markedsføring
- Electric Power Engineering / Electric Power Engineering
- Energy and Environmental Engineering / Energi og miljø
- Mechanical Engineering / Produktutvikling og produksjon
- Industrial Economics and Technology Management / Industriell Økonomi og Teknologiledelse
- Electronic Systems and Instrumentation
- Electronic Systems Design and Innovation / Elektronisk systemdesign og innovasjon

Specific skills / competencies

General office application competence.

Additional information

The Hydrogen unit was established in 2021 and provides the opportunity to be exposed to an early phase of a new company. We are a small dynamic team which is growing fast to meet our strategic ambitions. We continuously build on our project portfolio of hydrogen production facilities based on internal Hydro Aluminium hydrogen consumption, as well as stand alone opportunities in Norway and internationally. Green hydrogen, based on renewables energy, is seen as the missing piece in the puzzle to reach the Net Zero target by 2050 by the European Emissions and expected to grow substantially the next decades.



Industries that matter