

**Jobbno**ge ID: 295226  
**Deadline:** 3/20/2026  
**Website:** <http://www.ntnu.no>  
**Scope:** Fulltime  
**Duration:** Temporary

The Department of Information Security and Communication Technology has a vacancy for a position as

## PhD Candidate in Post-Quantum Cryptography for Privacy Preserving Protocols

### This is NTNU

NTNU is a broad-based university with a technical-scientific profile and a focus in professional education. The university is located in three cities with headquarters in Trondheim.

At NTNU, 9,000 employees and 43,000 students work to create knowledge for a better world.

You will find more information about working at NTNU and the application process [here](#).

Video: <https://youtu.be/Xt-yHCN5QS0>

### About the position

The [Department of Information Security and Communication Technology](#) invites applications for a PhD Research Fellow position in **Post-Quantum Cryptography for Privacy Preserving Protocols**. The successful candidate will be offered a 4-year appointment that includes teaching responsibilities.

Are you motivated to take a step towards a doctorate and open up exciting career opportunities? As a PhD Candidate with us, you will work to achieve your doctorate, and at the same time gain valuable experience that qualifies you for a further career in higher education and research, in and outside academia.

The selected candidate will conduct research in **Post-Quantum Cryptography** with a particular focus on **privacy-preserving protocols**. The research will cover major **Privacy-Enhancing Techniques (PETs)**, including **Fully Homomorphic Encryption (FHE)**, **Secure Multi-party Computation (MPC)**, and **Zero-Knowledge Proofs (ZKPs)**. The candidate will design, analyze, and implement advanced privacy-preserving cryptographic protocols, with applications to real-world domains such as **machine learning, distributed systems, and blockchain technologies**.

Your immediate leader will be the Head of the Cryptology Unit at the Department of Information Security and Communication Technology. The workplace will be located in Trondheim.

### Duties of the position

- Complete the doctoral training and successfully obtain a PhD degree.
- Conduct high-quality research within the scope outlined for the position.
- Publish scientific results in recognized academic venues and contribute to public dissemination of research.
- Actively participate in the [NTNU Applied Cryptology Lab \(NaCl\)](#) and its ongoing research activities.
- Engage in international academic activities including presenting at conferences and/or undertaking research stays at foreign educational institutions abroad.
- Contribute to career-development activities that support your progress as an independent researcher.

### Required selection criteria

- You must have a relevant Master's degree in computer science, mathematics or a related area with good results. Your course of study must correspond to a five-year Norwegian course, where 120 credits have been obtained at master's level. Master students can apply, but the master's degree must be obtained and documented before starting the position.
- If you are in your master's program, integrated PhD could be an option. Your MSc grades after your fourth year need to be completed with a grade B or better, in addition the IE-faculty require that your Bachelor degree is completed with a grade C or better. [Integrated PhD - Faculty of Information Technology and Electrical Engineering - NTNU](#).
- You must have a strong academic background from your previous studies and have an average grade from your Master's degree study, or equivalent education, which is equal to B or better compared to [NTNU's grading scale](#). If you do not have letter grades from previous

studies, you must have an equally good academic foundation. If you have a weaker grade background, you may be considered if you can document that you are particularly suitable for a PhD education.

- You must meet the requirements for admission to the PhD program in [Information Security and Communication Technology](#).
- Applicants who do not master a Scandinavian language or are not native English speakers must provide evidence of good English language skills, written and spoken. The following tests can be used as such documentation: TOEFL, IELTS or Cambridge Certificate in Advanced English (CAE) or Cambridge Certificate of Proficiency in English (CPE). Minimum scores are:
  - TOEFL: 600 (paper-based test), 92 (Internet-based test).
  - IELTS: 6.5, with no section lower than 5.5 (only Academic IELTS test accepted).
  - CAE/CPE: grade B or A
- Advanced programming skills, preferably experience with programming in C++/Rust/Go
- Ability to perform research in a cross-disciplinary environment.

PLEASE NOTE: For detailed information about what the application must contain, see paragraph "About the application".

The appointment is to be made in accordance with [NTNUs guidelines for recruitment positions](#) and [Regulations for the degrees philosophiae doctor \(ph.d.\) and philosophiae doctor \(ph.d.\) in artistic development work at the Norwegian University of Science and Technology \(NTNU\)](#) for general criteria for the position.

## Preferred selection criteria

- Good organization and communication skills.
- Relevant publication activities will be considered an advantage.

## Personal characteristics

We are seeking applicants who are:

- Able to work independently
- Work in a structured way, set goals and make plans to achieve them
- Highly motivated by fundamental scientific research of practical relevance
- Eager to disseminate research results both locally as well as through publications and presentations at international conferences.

In the evaluation of which candidate is best qualified, emphasis will be placed on education, experience and personal suitability, as well as motivation, in terms of the qualifications specified in the advertisement.

## We offer

- An exciting job with an important [mission](#) in society
- Developing tasks in a strong and international professional environment
- Career guidance and [follow-up during the PhD period](#)
- Open and inclusive working environment with committed colleagues
- Favorable terms as a member of the [Norwegian Public Service Pension Fund \(SPK\)](#)
- Norwegian language training at a basic level ([A2](#))

As a PhD Candidate at NTNU, you will have access to [employee benefits](#).

## Diversity

Diversity is a strength, and at NTNU we aim to be an employer that reflects the diversity in society and that makes use of the potential of the population's collective skills. Our vision is [Knowledge for a better world](#) and [our values are creative, critical, constructive and respectful](#). We believe that an organization that is equal, diverse and gender-balanced is essential for us to achieve our goals.

We strive to attract employees with different skills, life experiences and perspectives to contribute to even better problem solving of our societal mission in research and education.

If you think this position is relevant and interesting, we encourage you to apply, regardless of gender, functional ability and cultural background, or whether you have been out of work for a period of time.

At NTNU we want to increase the proportion of women in scientific positions. Female students are therefore encouraged to apply. We have a number of [measures](#) to promote equality.

## Salary and conditions

In the position of PhD Candidate, code 1017, your gross salary will normally be NOK 550 800,- per annum depending on qualifications and seniority. A 2% statutory contribution to the State Pension Fund is deducted from the salary.

The employment period is 4 years including teaching duties. Integrated PhD study candidates are welcome to apply.

For employment as a PhD Candidate, it is a prerequisite that you gain admission to the PhD programme in [Information Security and Communication Technology](#) within three months of your employment contract start date, and that you participate in an organized doctoral programme throughout the period of employment.

As an employee at NTNU, it is important that you keep yourself up to date with academic and organizational changes and adapt to them.

For the necessary professional and social interaction, it is a prerequisite that you are physically present and available to the institution on a daily basis.

The appointment is carried out in accordance with the principles of the [State Employees Act](#), and [Export control](#) (legislation that regulates the export of knowledge, technology and services). Candidates who, after assessment of the application and attachments, are considered to be in conflict with the criteria in the latter act, will not be able to be employed.

## About the application

The attachments (including a description of your scientific work) must accompany the application as these documents form the basis of the application assessment. The documents must be in Norwegian/a Scandinavian language or English.

**Please note:** the application will only be assessed on the basis of the information we have received by the application deadline. Therefore, make sure that your application clearly shows how your skills and experience meet the criteria described above. The application and all attachments must be sent electronically via [Jobbnorge.no](#). If you are invited to an interview, you must bring certified copies of certificates and diplomas upon request.

The application must include:

- Transcripts and diplomas for Bachelor's and Master's degrees
- Curriculum Vitae (CV)
- Copy of the Master's thesis (unless you are applying for the integrated PhD program).
- Short letter of motivation (400 words/1 page)
- Publications or other relevant research work (if applicable)
- Certificates or other relevant documentation (if applicable)
- Link(s) to public GitHub repositories or other code portfolios demonstrating relevant programming experience (e.g., in C++, Rust, or Go) (if available)
- Names and contact information of three referees
- If the thesis has been recently submitted, a draft may be attached.
- Final documentation of a completed Master's degree must be provided before starting the position.

If all, or parts, of your education has been taken abroad, we also ask you to attach documentation of the scope and quality of your entire education, both Bachelor's and Master's education, in addition to other higher education. If your institution uses "diploma supplement" (normal for most European institutions), you must attach this. A description of the documentation required can also be found [here](#). If you already have a statement from [Norwegian Directorate for Higher Education and Skills \(HK-dir\)](#), please attach this as well.

Joint work will be considered. If it is difficult to identify your contribution to joint work, you must attach a brief description of your participation.

When assessing the best qualified, we emphasize necessary qualifications such as education, experience and personal suitability. Motivation for the position, ambitions, and potential for research will also count when assessing the candidates.

NTNU recognizes a wide range of academic contributions and has committed itself to [The San Francisco Declaration on Research Assessment](#) and [CoARA](#) (responsible assessment of research and recognition of a greater breadth of academic contributions in accordance with NTNU's social mission).

## General information

A public list of applicants with name, age, job title and municipality of residence is prepared after the application deadline. If you wish to be exempt from entry on the public applicant list, this must be justified. Assessment will be made in accordance with [current legislation](#). You will be notified if the exemption is not granted.

If you think this position looks interesting and in line with your qualifications, you are welcome to apply.

If you have any questions about the position, please contact Associate Professor Jeongeun Park, email: [jeongeun.park@ntnu.no](mailto:jeongeun.park@ntnu.no).

If you have any questions about the recruitment process, please contact HR consultant Julie Lindland, email: [julie.lindland@ntnu.no](mailto:julie.lindland@ntnu.no).

**Application deadline: March 20th 2026.**

For practical information about [working at NTNU](#), please visit [this webpage](#).

[The city of Trondheim](#) is a modern European city with a rich cultural scene. [Trondheim is the tech capital of Norway](#) with a population of 200,000. The Norwegian welfare state, including healthcare, schools, kindergartens and overall equality, is probably the best of its kind in the world. Professional subsidized day-care for children is easily available. Furthermore, Trondheim offers great opportunities for education (including international schools) and possibilities to enjoy nature, culture and family life and has low crime rates and clean air quality.

## NTNU - knowledge for a better world

### NTNU - knowledge for a better world

The Norwegian University of Science and Technology (NTNU) creates knowledge for a better world and solutions that can change everyday life.

### Department of Information Security and Communication Technology

Research is vital to the security of our society. We teach and conduct research in cyber security, information security, communications networks and networked services. Our areas of expertise include biometrics, cyber defence, cryptography, digital forensics, security in e-health and welfare technology, intelligent transportation systems and malware. The Department of Information Security and Communication Technology is one of seven departments in the [Faculty of Information Technology and Electrical Engineering](#).

## Additional information

**Place of service:**

NTNU 7491 Trondheim (Trondheim Municipality)