



Jobbnorge ID: 260168

Deadline: 4/25/2024

Website: <https://www.uib.no/om/84775/ledige-stillinger-ved-uib>

Scope: Fulltime

Duration: Fixed Term

PhD Research Fellow in Quality Enhancing Mathematics Education

UiB - Knowledge that shapes society

Through robust and close interaction with the world around us - globally, nationally and locally - we shall be instrumental in building a society based on knowledge, skills and attitudes.

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Video: <https://www.youtube.com/watch?v=oyaThmlq6Kg>

PhD position

At the [Department of Mathematics](#) there is a vacancy for a Ph.D. position in educational research to study quality-enhancing initiatives in mathematics education at higher education level. The position is for a fixed term of three years, with the opportunity for a fourth year consisting of mandatory work (e.g. teaching duties at the Department).

About the project/work tasks:

In today's technological society, competence within mathematical subjects is more important than ever to succeed in solving today's and future challenges: mathematics is the language of science. The Department of Mathematics (MI) has a significant teaching responsibility to develop necessary mathematical competence, especially in the early stages of STEM education courses. Teaching arrangements with plenary lectures, group exercises, and mandatory submissions have been standard for several decades, but inspired by new student-active teaching forms, the department has initiated several study quality projects aimed at increasing students' learning outcomes.

In this project, one wishes to examine how collaborative learning can contribute to increased learning outcomes in mathematics by developing students' collaboration skills and strengthening an inclusive collaboration culture. Additionally, one wants to investigate students' sense of belongingness, cross-cutting skills, and academic achievements.

The PhD candidate will

- Study implications of various initiatives for pedagogical development and study quality at individual, institute, institution, and sector levels within research on mathematics education in STEM education at university level
- Investigate correlations between teachers' and students' attitudes, motivation practices, and learning outcomes together with other partners in the project
- Analyze data, write and publish scientific articles
- Be an active part of the department's education quality work and collaborate tightly with the newly established STEM Education Research Center at the Faculty of Mathematics and Natural Sciences

Qualifications and personal qualities:

- Applicants must have obtained a master's degree or equivalent education in a STEM field. Master's students can apply if they complete their final master's examination before 15.07.2024. It is a condition of employment that the master's degree has been awarded
- Strong mathematical background is an advantage
- Applicants must be able to work independently and in a structured manner and demonstrate good collaborative skills
- Applicants must be proficient in both written and spoken English
- Applicants must have a good command of the Norwegian language
- Teaching competence in mathematics or mathematics didactics at a relevant level is an advantage
- Experience in higher education development and analysis, as well as teaching, is an advantage
- Experience with or competence in using surveys in educational research is an advantage
- Experience in assessing learning outcomes is an advantage

Personal and relational qualities will be emphasized. Ambitions and potential will also count when evaluating the candidates.

Special requirements for the position

The University of Bergen is subjected to the regulation for export control system. The regulation will be applied in the processing of the applications.

About the PhD Research Fellow position:

The fellowship will be for a period of 3 years, with the possibility for a 4th year, consisting of 25 % compulsory work (e.g. teaching responsibilities at the department) distributed over the employment period. The 4th year is contingent on the qualifications of the candidate and the teaching needs of the department and will be decided by the head of department upon appointment.

The employment period may be reduced if you have previously been employed in a qualifying post (e.g. research fellow, research assistant).

About the research training

As a PhD Research Fellow, you must participate in an approved educational programme for a PhD degree within a period of 3 years. The deadline for applying for admission to the PhD programme at The Faculty of Mathematics and Natural Sciences is 2 months after you start your position or after the start of the research project that will lead to the PhD degree. It is a condition that you satisfy the [enrolment requirements for the PhD programme](#) at the University of Bergen.

We can offer:

- a good and professionally stimulating working environment
- salary as PhD research fellow (code 1017) in the state salary scale. This constitutes a gross annual salary of NOK 532 200 (equivalent to pay grade 54). Further increases in salary are made according to length of service in the position
- enrolment in the Norwegian Public Service Pension Fund
- good [welfare benefits](#)

Your application must include:

- a brief account of the applicant's research interests and motivation for applying for the position
- the names and contact information for two referees. One of these should be the main advisor for the master's thesis or equivalent thesis
- CV
- transcripts and diplomas showing completion of the bachelor's and master's degrees. If you have not yet completed your master's degree, please submit a statement from your institution confirming the expected date of award of your master's degree instead. Your master's degree must be documented with transcripts and/or diploma, alternatively a confirmation from your institution on completed degree and your grade, by 15.07.2024
- relevant certificates/references
- approved documentation of proficiency in English (if required, cf. [English language requirements for PhD admission](#))
- a list of any works of a scientific nature (publication list)
- any publications in your name

The application and appendices with certified translations into English or a Scandinavian language must be uploaded at Jobbnorge.

General information:

For further details about the position, please contact professor Antonella Zanna Munthe-Kaas (head of department), e-mail Antonella.Zanna@uib.no, or professor Sehoia Harris Cotner (director, STEM Education Research Center), e-mail: Sehoia.Cotner@uib.no

For HR related matters, please contact HR adviser Magnus Larsen, University of Bergen, e-mail: magnus.larsen@uib.no

The state labour force shall reflect the diversity of Norwegian society to the greatest extent possible. Age and gender balance among employees is therefore a goal. It is also a goal to recruit people with immigrant backgrounds. People with immigrant backgrounds and people with disabilities are encouraged to apply for the position.

We encourage women to apply. If multiple applicants have approximately equivalent qualifications, the rules pertaining to moderate gender quotas shall apply.

The University of Bergen applies the principle of public access to information when recruiting staff for academic positions. Information about applicants may be made public even if the applicant has asked not to be named on the list of persons who have applied. The applicant must be notified if the request to be omitted is not met.

For further information about the recruitment process, click [here](#).

Life as a PhD candidate at UiB

Marion Claireaux tells about life and work as a PhD candidate at UiB.

Video: <https://www.youtube.com/watch?v=nrt6VxMeJ4&index=2&list=PLf8ZIYfAO0qjhROTj6SthDbSScg0ISO6G>

About UiB

The University of Bergen is a renowned educational and research institution, organised into seven faculties and approximately 54 institutes and academic centres. Campus is located in the centre of Bergen with university areas at Nygårdshøyden, Haukeland, Marineholmen, Møllendalsveien and Årstad.

There are seven departments and several centres at Faculty of Mathematics and Natural Sciences. [Read more about the faculty](#) and [departments](#).

Additional information

Place of service:

Allégaten 41 5007 Bergen (Bergen Municipality)