WISE call for course development

2024-01-10

Application deadline

The Wallenberg Initiative Materials for Sustainability (WISE, https://wise-materials.org) is the largest-ever investment in materials science in Sweden and encompasses major efforts at Sweden's leading universities over the course of (at least) 10 years. The aim is to create the conditions for a sustainable society by researching the next generation of ecofriendly materials and manufacturing processes. This will also facilitate better technology for energy systems of the future, and to combat climate change, pollution, and toxic emissions. Specifically, efforts will be devoted to identifying new or significantly improve materials, which provide a distinct advantage in physical, chemical, biological, or functional performance when compared to existing materials and technologies. This relates to materials that demand fewer resources, are less environmentally hazardous, and enable sound and efficient recycling processes. WISE will also explore materials that, when used in energy technology, generate less negative climate impact under operation, while offering high performance and efficiency when in action at large scales.

The graduate school within WISE educates young researches and plays an important role in realizing these aims. The WISE graduate school will support course development throughout the duration of the WISE program.

Aim and scope

The aim of this call is to make high-quality PhD topical courses with substantial sustainability content easily available for all PhD students within WISE, by supporting course development. We wish to fund courses with potential to become permanent additions to the PhD curriculum, but proposals for courses with exploratory setups or teaching concepts are also very welcome.

You can apply for developing a new course (which could for example be a combination and update of several older courses from different WISE universities), as well as develop an additional module, focusing on sustainability, to be added to an already existing course. In the latter case, the WISE funding applies to the additional module.

In addition to the funding, WISE provides some administrative support to the funded courses, such as access to a Canvas area (https://www.instructure.com/canvas) for convenient digital teaching across universities, automatic student surveys, and handling of course registrations.

The course must be given twice during the period Sept 2024 – Dec 2027 in a format allowing WISE PhD students from all WISE universities to take the course. This typically means that the course is for the most part given digitally, probably combined with a few days where you meet physically to for example conduct experiments.

The course must contain a substantial amount of relevant sustainability content. Here, 1.5 ECTS (one week of study) is considered to be substantial. The topical subject of the course should be

linked to the addressed sustainability content in some way. For a course on solar cells, this could for example mean that the students perform a life cycle analysis of solar cell materials, or analyze the degree of circularity of solar cell materials.

Who can apply?

This call is open for academic researchers at WISE's six partner universities (Chalmers University of Technology, KTH Royal Institute of Technology, Linköping University, Uppsala University, Stockholm University, and Lund University) and at Luleå University of Technology as well as specifically preselected researchers at Karlstad University, Umeå University, and Örebro University. Collaboration between teams from several WISE universities is strongly encouraged. The URG representatives at each university will be involved as coordinators. Contact your URG representative as early as possible in the application process.

Budget

The costs for developing the course and giving the course twice will be covered for all courses that the WISE Board decides to support. Since costs may vary significantly depending on, *e.g.*, the size of the course and lab equipment use a detailed budget with explanations must be included in the application.

Use of funding

Use of funding is flexible. The funding provided is meant to support both the development of the course and costs for giving the course. The funding can be used for, *e.g.*, salaries to the individuals developing the course, costs for inviting guest lecturers, and costs for performing experiments. Note that student travel and accommodation costs are meant to be covered through their supervisor's WISE research project funding.

Salary costs may include maximum 50% LKP. Indirect costs are covered according to the following: costs include a maximum compensation of 3.5% surcharge for premises and a maximum of 18.45% surcharge for indirect costs.

75% of the funding is paid when the course has been given for the first time, and the remaining 25% when it has been given for the second time.

Proposal structure/format

The proposal should contain the following information under appropriate headings:

1. Preliminary name and size (ECTS)of the course
2. Names and affiliations of the course developers
3. A brief description of the pedagogical merits of the course developers
4. A course description including intended learning outcomes
5. A brief outline of the planned development work

6. Relevance for WISE PhD students
7. Degree of collaboration and synergy effects between WISE universities
8. Detailed budget with motivation for each item

The maximum total length of the proposal is 5 pages.

Evaluation Criteria

The evaluation criteria that will be used for evaluating the proposal are:

- Overall quality of the course
- Quality of the sustainability content
- Relevance for WISE PhD students
- Feasibility
- Diversity (including, but not exclusively, gender) of the course development team

Commitment letter

The participating university (or universities) shall provide a commitment letter in which they assure that they will cover necessary expenses not covered by the program. The letter should be signed by the decision-maker (head of department/division or other). The program does not provide a template for this letter.

Submission procedure

The proposal should be submitted as a single PDF file through the application portal https://www.lyyti.in/WISE_CourseDevelopment no later than 2024-01-10.

Timeline

2023-09-28 Call opens.

2024-01-10 Application deadline

2024-02-26 WISE board decision. The decision will be communicated after this date.