Application for funding of faculty common course 2020
Ansökan om medel för fakultetsgemensam forskarutbildningskurs 2020

English course title Vacuum Technology
Kursnamn på engelska

Swedish course title Vakuumteknik
Kursnamn på svenska

Extent (credits) 5
Omfattning (högskolepoäng)

Language of instruction English
Undervisningsspråk

Recommended prerequisites Basic knowledge of physics and chemistry at the undergraduate level
Rekommenderade förkunskaper

General course objective/s and learning outcomes (Also specify which PhD examination goals that are addressed/covered. Describe how.)
Kursens syfte och mål (Beskriv vilka mål för examen på forskarnivå som beaktas och på vilket sätt.)
The general course objective is to provide basic theoretical and practical knowledge of vacuum technology and the equipment that is used in vacuum- and thin film technology. In general terms, the course will provide knowledge and thorough understanding in a relevant and inter-disciplinary scientific subject as well as give methodological and practical skills. This is achieved by linking basic theory to practical problems and challenges. Consequently, the course will address several PhD examination goals, such as good subject knowledge and scientific methodological skills.

Course contents
Kursinnehåll
The lectures will focus on the following subjects: Definition of pressure and how it can be measured, the different gas flow regimes, the materials used in vacuum equipment, different vacuum pumps and manometers, construction of vacuum systems, and residual gas analysis.

Instruction (course structure)
Undervisning (kursens uppläggning)
There will eight lectures (each 2*45min) and at the end of the course there will be a written examination.

Assessment (form of examination)
Examination (examinationsformer)
Written examination.

Course examiner (name, e-mail) Tomas Nyberg, tomas.nyberg@angstrom.uu.se
Examinator (namn, e-post)

Department with main responsibility Department of Engineering Sciences (this dept. be split up, future name not known)
Huvudansvarig institution
Contact person/s (course responsible teacher) (name, e-mail) Tomas Nyberg, tomas.nyberg@angstrom.uu.se

Course dates/period HT20
Kurs datum/period

Maximum number of participants 30
Antal platser

Submit the application for admission to Tomas Nyberg, Box 534 Ångström Laboratory, 751 21 Uppsala or e-mail to tomas.nyberg@angstrom.uu.se
Skicka anmälan till kursen till

Submit the application not later than 2020-09-30
Skicka anmälan senast