SYLLABUS

Risk and Fire Chemistry 7.5 credits K0015K

Risk och brandkemi

Course syllabus admitted: Autumn 2023 Sp 1 - Present

DECISION DATE
2021-02-17

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Risk and Fire Chemistry 7.5 credits K0015K

Risk och brandkemi

First cycle, K0015K

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	G U 3 4 5	Kemi	Chemistry

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and K0016K Chemical principles or similar.

Selection

The selection is based on 1-165 credits.

Course Aim

After completion of the course, the student should
• Be able to evaluate health, environmental, explosive and fire hazards for different organic, inorganic and radioactive substances based on their hazard classification
• Be able to account for basic terminology with relevance for risk and fire chemistry
• Be able to describe and explain different properties and reactions of organic, inorganic and radioactive substances
• Be able to connect properties and reactions to the chemical structure and composition of the substances
• Be able to assess appropriate handling of hazardous substances both to prevent risks, but also in order to take care of accidents
• Be able to do both qualitative and quantative assessments on the result of combustion and other chemical reactions

Contents

The course covers the chemistry of hazardous organic and inorganic substances based on society’s systematic classification and handling of hazardous substances.
The course handles fire and fire extinguishing, explosive substances, toxic substances, corrosive substances, radioactive substances and substances that react violently with water. Risk assessments when handling hazardous substances. Different ways to classify substances based on their properties.

Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.
The teaching takes place in the form of lessons and laboratory work in groups. The lessons go through relevant theoretical content with discussions around various questions and practical examples. The laboratory sessions provide opportunity for practical experience of the theory content. The results are reported in the form of written laboratory reports. Attendance at the laboratory sessions is compulsory.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.
Approved laboratory reports and approved written exam are necessary for passing the course.

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Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term “unauthorized aids” refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course K0015K is equal to KGK038

Course offered by

Department of Civil, Environmental and Natural Resources Engineering

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Written exam	G U 3 4 5	6	Mandatory	A07	
0003	Laboratory Reports	U G#	1.5	Mandatory	A21	

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Assistant Director of Undergraduate Studies Eva Gunneriusson, Department of Civil, Environmental and Natural Resources Engineering 2021-02-17

Syllabus established

Course plan approved by the Department of Chemical Engineering and Geosciences 2007-02-28.

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