MATH-468 **Numerical methods for saddle point problems**

Cursus	Sem.	Type
Computational science and Engineering	MA2, MA4	Opt.

Language of teaching	English
Credits	5
Session	Summer
Semester	Spring
Exam	Oral
Workload	150h
Weeks	14
Hours	**4 weekly**
Courses	2 weekly
Exercises	2 weekly
Number of positions	

Remark

pas donné en 2019/20

Summary

The aim of the course is to give a theoretical and practical knowledge of the finite element method for saddle point problems, such as fluid dynamics, elasticity and electromagnetic problems.

Content

Learning Prerequisites

Required courses

Analysis I II III IV, Numerical Analysis, Advanced numerical analysis, Sobolev spaces and elliptic equations, Numerical Approximations of PDEs I

Assessment methods

Oral exams and evaluation of the report of a mini-project.

Resources

Notes/Handbook

Notes for each lectures will be provided every week.