1. Course details
Approved by the Education Committee of the Faculty of Sciences 01-03-2007. The syllabus is valid from 01-07-2007. The course is at the Second cycle.

2. General information
The course is part of the main field of study in Mathematics at the Faculty of Science. The course is optional at the Second cycle in a Master’s degree in Mathematics. The course is also offered as a single subject course. The language of instruction is contingently English.

3. Learning outcomes
On completion of the course, the students shall:

- have developed the ability for mathematical communication orally and in writing,
- have acquired intensive knowledge in a special area of algebra.

4. Course content
The course is an advanced continuation and extension of the course Algebraic Structures. Its content is specified by the course-leader in consultation with the students. Some of the following areas can for example be treated in the course:

(i) Algorithm and complexity theory
(ii) Coding theory
(iii) Algebraic geometry
(iv) Elementary representation theory

5. Teaching and assessment
Teaching consists of lectures and seminars. Compulsory hand-in exercises might be given during the course.

Examination takes the form of a written test and/or an appurtenant oral examination.

Students who fail the ordinary tests will have an opportunity to take another test in close proximity to the ordinary test.

6. Grades
Students are awarded one of the following grades: Distinction, Pass or Fail.

7. Admission requirements
To be eligible for the course requires: At least 67.5 ECTS credits in mathematics, therein the course MATM11 Algebraic Structures 7.5 ECTS credits.

8. Literature
According to a list established by the department, available at least five weeks before the start of the course. See the web-page for Mathematics NF.

9. Further information
The course cannot be credited as part of a degree along with MAT321 Specialised course on Algebra 2, 5p.