MG2037 Industrial Adhesive Bonding 6.0 credits

Industriell limningsteknik

This is a translation of the Swedish, legally binding, course syllabus.

Establishment

Course syllabus for MG2037 valid from Autumn 2012

Grading scale

A, B, C, D, E, FX, F

Education cycle

Second cycle

Main field of study

Specific prerequisites

180 credits within Engineering and Swedish B/Swedish 3 and English A/English 6 plus MG1001 Manufacturing Technology or

MG1006 Design and Product Realization - Manufacturing

or equivalent

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After the completion of the course the participants will be able to construct and specify an industrial adhesive joint.

Course contents

Economy, survey of adhesives and different bonding solutions, example of bonded structures, demonstrations, fields of application, practical bonding theory, preparation of adhesive joints, joint formation, strength, production points of view, treatment of bonding surfaces, bonding of: metal, thermoplastic, composite materials, elastomeres; work hygiene, legal aspects, thermosets, the risks involved, production equipment, treatment, blending and dosing, application of bonds, durability of bonds, effects on durability, how to improve durability, quality assurance, testing possibilities, production control, risks of errors - checklists.

Disposition

Lectures, exercises and field trip

Course literature

Egenutvecklat kurslitteratur och kommersiellt infomaterial.

Equipment

None

Examination

- INL1 - Assignment, 1.0 credits, grading scale: P, F
- STU1 - Study Visit, 1.0 credits, grading scale: P, F
- TEN1 - Written exam, 4.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

Oral presentation of homework assignment

Written examination

Other requirements for final grade

Examination (TEN1; 4 cr)
Homework assignments (INL1; 1 cr)
Participation in field trip (STU1; 1 cr)

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.