Basic Technology I 7.5 credits M0023T

Teknologi I för basår

Course syllabus admitted: Autumn 2017 Sp 1 - Spring 2019 Sp 4

DECISION DATE
2017-02-13

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Teknologi I för basår

First cycle, M0023T

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G#	Maskinteknik	Mechanical Engineering

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 +
Mathematics 2a/2b/2.
Or:
Mathematics C

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Examiner

Nazanin Emami

Course Aim

The student shall be able to perform simple calculations and tests regarding normal and shear stresses, torsion in shafts, bending of beams, deformations, instability and general states of stress and strain.
Divided into 3 categories below, for you as a student after completing the course:
1. Knowledge and Understanding
2. Skills and Abilities
3. Judgement and Assessment Ability

Contents

Problem solving. Applied mechanics.
Strength of Materials.
Classification of materials. Torsion in shafts. Bending of beams, normal and shear stresses, deformations. Instability. General states of stress and strain.
Elements of design, standards.
Drawing and sketching, technical reports.

Realization

Each course occasion´s language and form is stated and appear on the course page on Luleå University of Technology's website.
Teaching is given in the form of lectures and compulsory laboratory work.

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. Continuous assessment. Each student must complete and have approved all home assignments and laboratory work in order to receive a pass grade. Grades are awarded once the course is completed. Three re-turn for each home assignment is allowed. All home assignments will be handled electronically and via Fronter website.

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Remarks

Credits for this course do not count towards study programmes.

Overlap

The course M0023T is equal to MTM511, MX001T

2113

Literature. Valid from Autumn 2012 Sp 1

Sture Lönnelid, Rune Norberg: Grudläggande hållfasthetslära, ISBN 978-91-7582-168-9 (Stiftelsen Kompendieutgivning, Sundbyberg, http://www.kompendieutgivningen.se/).
Sture Lönnelid, Rune Norberg: Formelsamling, ISBN 978-91-7582-168-9 (Stiftelsen Kompendieutgivning, Sundbyberg, http://www.kompendieutgivningen.se/).
Handouts.

Course offered by

Department of Engineering Sciences and Mathematics

Items/credits

Number	Type	Credits	Grade
0009	Home assignments	5.5	U G#
0010	Laboratory work	2	U G#

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 Mats Nässström 2017-02-13

Syllabus established

The syllabus was established by the Department of Applied Physics and Mechanical Engineering 2007-02-28, and remains valid from autumn 2007.

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