Opasraportti

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Open University - studies at the Faculty of Technology (2017 - 2018)

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

466106S: Advanced topics on design of steel structures, 6 op
466105S: Design of Steel Structures, 6 op
ayA440190: Industrial Engineering and Management (IEM) Minor Subject Studies (OPEN UNI), 25 op

Compulsory
ay555225P: Basics of industrial engineering and management (OPEN UNI), 5 op
ay555285A: Project management (OPEN UNI), 5 op
ay555286A: Process and quality management (OPEN UNI), 5 op
ay555264P: Managing well-being and quality of working life (OPEN UNI), 5 op
ay555242A: Product development (OPEN UNI), 5 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

466106S: Advanced topics on design of steel structures, 6 op

Voimassaolo: 01.08.2015 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuysikkö: Field of Mechanical Engineering
Arvostelu: 1 - 5, pass, fail
Opettajat: Kangaspuoiskari, Matti Johannes
Opintokohteen kielet: Finnish
Leikkaavuudet:
ay466106S Advanced topics on design of steel structures (OPEN UNI) 6.0 op
460128S-01 Advanced Course in Design of Steel Structures I, examination 0.0 op
460128S-02 Advanced Course in Design of Steel Structures I, exercise work 0.0 op
460128S Advanced Topics on Design of Steel Structures I 4.0 op

ECTS Credits:
6 ECTS

Language of instruction:
Finnish

Timing:
Periods 3 and 4

Learning outcomes:
After completing the course the student is capable of explain the performance and design principles of welded steel structures exposed to fatigue loading. He is able to design the plated structural elements and cold-formed members. He is able to analyze and design a steel frame. He is able to analyze dynamically loaded structures and can explain the effect of vibration on steel structures strength and reliability.

Contents:

Mode of delivery:
Face-to-face.

Learning activities and teaching methods:
Lectures and exercises 52 h. Self-study 110 h. Total 162 h = 6 ECTS Credits.

Target group:
Major students in Structural Engineering, Machine design, and Engineering Mechanics. 466102A

Prerequisites and co-requisites:

Recommended or required reading:

Assessment methods and criteria:
Three midterm exams or one final exam is required. One design exercise is required.

Grading:
The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Matti Kangaspuroskari

466105S: Design of Steel Structures, 6 op

Voimassaolo: 01.08.2015 -
Opiskelumuoto: Advanced Studies
Laji: Course
Vastuuysikkö: Field of Mechanical Engineering
Arvostelu: 1 - 5, pass, fail
Opettajat: Kangaspuroskari, Matti Johannes

Opintokohteen kielet: Finnish

Leikkaavuudet:

<table>
<thead>
<tr>
<th>Course ID</th>
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<tbody>
<tr>
<td>485118S</td>
<td>Design of Steel Structures</td>
<td>5.0 op</td>
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<td>ay466105S</td>
<td>Design of Steel Structures (OPEN UNI)</td>
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<td>460127S-01</td>
<td>Design of Steel Structures, examination</td>
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<td>Design of Steel Structures, exercise work</td>
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<tr>
<td>460125A</td>
<td>Introduction to Design of Steel Structures</td>
<td>4.0 op</td>
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<tr>
<td>460127S</td>
<td>Design of Steel Structures</td>
<td>4.0 op</td>
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</tbody>
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ECTS Credits:
6 ECTS

Language of instruction:
Finnish

Timing:
Periods 1 and 2
Learning outcomes:
After completing the course the student is capable of explaining the crystalline structure of steel material and he understands elasto-plastic material model. He is able to explain the effect of inclusions, heat treatment and welding process to the mechanical properties of a steel material. The student is familiar with fire design of steel structures. He is able to explain common types of corrosion. The student is able to design the most typical joints in a steel frame and he can analyze simple steel structures. He is also able to analyze stability problems and explain the effects of imperfections and second order effects on frame behavior and member forces.

Contents:

Mode of delivery:
Face-to-face.

Learning activities and teaching methods:
Lectures and exercises 52 h. Self-study 110 h. Total 162 h = 6 ECTS Credits.

Target group:

Prerequisites and co-requisites:

Recommended or required reading:

Assessment methods and criteria:
Three midterm exams or one final exam is required. One design exercise is required.

Grading:
The course utilizes a numerical grading scale 1-5. In the numerical scale zero stands for a fail.

Person responsible:
Matti Kangaspuoskari

ayA440190: Industrial Engineering and Management (IEM) Minor Subject Studies (OPEN UNI), 25 op

Voimassaolo: 01.01.2014 -
Opiskelumuoto: Intermediate Studies
Laji: Study module
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
A440190  Industrial Engineering and Management (IEM) Minor Subject Studies 25.0 op

ay555225P: Basics of industrial engineering and management (OPEN UNI), 5 op

Voimassaolo: 01.01.2014 -
Opiskelumuoto: Basic Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Jukka Majava
Opintokohteen kielet: Finnish
Leikkaavuudet:
555225P  Basics of industrial engineering and management 5.0 op
ay555285A: Project management (OPEN UNI), 5 op

Voimassaolo: 01.01.2014 -
Opiskelumuoto: Basic Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Kirsi Aaltonen
Opintokohteen kielet: Finnish
Leikkaavuudet:
  555288A Project Management  5.0 op
  555285A Project management  5.0 op

ay555286A: Process and quality management (OPEN UNI), 5 op

Voimassaolo: 01.01.2014 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Osmo Kauppila
Opintokohteen kielet: Finnish
Leikkaavuudet:
  555286A Process and quality management  5.0 op

ay555264P: Managing well-being and quality of working life (OPEN UNI), 5 op

Voimassaolo: 01.01.2014 -
Opiskelumuoto: Basic Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opintokohteen kielet: Finnish
Leikkaavuudet:
  555264P Managing well-being and quality of working life  5.0 op

ay555242A: Product development (OPEN UNI), 5 op

Voimassaolo: 01.01.2014 -
Opiskelumuoto: Intermediate Studies
Laji: Course
Arvostelu: 1 - 5, pass, fail
Opettajat: Kai Hänninen
Opintokohteen kielet: Finnish
Leikkaavuudet:
  555242A Product development  5.0 op