

## **Degree Programme in Industrial Management (240 cr)**

*English translation, degree programme conducted in Swedish.* Degree: **Yrkeshögskoleexamen i teknik**  
Qualification title: **Ingenjör (YH)**  
Duration of studies: **4 years**  
Study type: **Full-time** **D**

- » [Generic competences](#)
- » [Language Information for Students with Swedish or Finnish as Prior Language of Instruction.](#)

**Kontaktuppgifter:** [Enheter](#) | [Utbildningsansvariga](#)

| Code      | Name  | Cr/year/total |    |    |   |   |       |
|-----------|---|---------------|----|----|---|---|-------|
|           |   | 1             | 2  | 3  | 4 | 5 | Total |
| Gru       | <b>Core Studies</b>   |               |    |    |   |   | 60 cr |
| TKV18TG01 | <b>Engineering Core Studies 1</b>   | 15            |    |    |   |   | 15 cr |
| TKV18IN01 | • Introduction to UAS Studies   | 1             |    |    |   |   | 1 cr  |
| TKV18MA01 | • Functions and Equations 1   | 3             |    |    |   |   | 3 cr  |
| TKV18MA02 | • Geometry and Vectors  | 3             |    |    |   |   | 3 cr  |
| TKV18GF01 | • Basic Course in Business Economics  | 3             |    |    |   |   | 3 cr  |
| TKV18TD01 | • Applied Software Tools  | 5             |    |    |   |   | 5 cr  |
| TKV18TG02 | <b>Engineering Core Studies 2</b>   | 17            |    |    |   |   | 17 cr |
| TKV18MA03 | • Functions and Equations 2   | 3             |    |    |   |   | 3 cr  |
| TKV18MA04 | • Derivatives and Integrals   | 3             |    |    |   |   | 3 cr  |
| TKV18ME01 | • Mechanics   | 5             |    |    |   |   | 5 cr  |
| TKV18EL01 | • Electricity and Magnetism   | 3             |    |    |   |   | 3 cr  |
| TKV18SV01 | • Swedish for Engineers   | 3             |    |    |   |   | 3 cr  |
| TKV18TG03 | <b>Engineering Core Studies 3</b>   |               | 15 |    |   |   | 15 cr |
| TKV18MA05 | • Differential Equations  |               | 3  |    |   |   | 3 cr  |
| TKV18EN01 | <p>• <b>English for Working Life</b></p> <p><i>The course enables the students to become confident in using English at work and in situations connected with work by providing them tools for basic job related documents and, to improve their understanding of grammar to allow them to work more successfully in English.</i></p> <p><i>The course will also give tools for students to be able to negotiate and manage meetings and other working life related situations in English, while at the same time developing fluency in English.</i></p>   |               | 3  |    |   |   | 3 cr  |
| TKV18HV01 | • Hydromechanics and Thermal Physics  |               | 4  |    |   |   | 4 cr  |
| TKV18FI01 | • Finnish   |               | 2  |    |   |   | 2 cr  |
| TKV18AE01 | • General Energy Technology   |               | 3  |    |   |   | 3 cr  |
| TKV18TG04 | <b>Engineering Core Studies 4</b>   |               |    | 13 |   |   | 13 cr |
| TKV18EN02 | <p>• <b>Technical English for Engineers</b></p> <p><i>The course enables the students to understand the differences between Standard English and language for special purposes.</i></p> <p><i>Students will also broaden their knowledge of common features of academic and technical writing and are able to apply their skills to their future engineering reports.</i></p> <p><i>Students learn how to express themselves orally by presenting and discussing technical phenomena whereby they will also be given tools to expand their grammatical knowledge and engineering English vocabulary enabling them to use a greater range of structures while speaking and writing in English.</i></p> |               |    | 3  |   |   | 3 cr  |
| TKV18FI02 | • Finnish for Working Life  |               |    | 4  |   |   | 4 cr  |

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| TKV18TR01 | • <b>Technical Reporting</b>   |    |   | 3  |   |  | 3 cr   |
| TKV18KE01 | • <b>Chemistry</b>   |    |   | 3  |   |  | 3 cr   |
| Yrk       | <b>Professional Studies</b><br><i>The following study modules are compulsory (105 cr):</i><br>PRE18EN Economy and Labour Market<br>MAP18MT Basic in Engineer Technology<br>MAP18MO Engine Technology<br>PRE18MF Marketing and Sales<br>PRE18EK Advanced Economics<br>PRE18PP Production<br>PRE18AF Business Development<br><br><i>One of the following study modules is compulsory (15 cr):</i><br>MAP18PT Manufacturing Technology<br>MAP18ET Energy Technology |    |   |    |   |  | 120 cr |
| PRE18EN   | <b>Economy and Labour Market</b>   |    | 6 | 9  |   |  | 15 cr  |
| PRE18EN01 | • <b>Cost and Benefit Analysis</b>   |    | 3 |    |   |  | 3 cr   |
| PRE18EN02 | • <b>Leadership and Labor Law</b>  |    |   | 5  |   |  | 5 cr   |
| MAP18EN03 | • <b>Ledningssystem</b>  |    |   | 4  |   |  | 4 cr   |
| MAP18EN04 | • <b>Occupational Health and Safety</b><br>- Arbetskyddslagstiftning<br>- Arbetshälsa<br>- Riskbedömning<br>- Känna till myndigheters och arbetshälsövårdens roll  |    | 3 |    |   |  | 3 cr   |
| MAP18MT   | <b>Basic in Engineer Technology</b>  | 12 |   |    | 3 |  | 15 cr  |
| MAP18MT01 | • <b>Technical Drawing</b>   | 4  |   |    |   |  | 4 cr   |
| MAP18MT02 | • <b>3D-modellering</b>  | 3  |   |    |   |  | 3 cr   |
| MAP18MT03 | • <b>Material Science</b>  | 5  |   |    |   |  | 5 cr   |
| MAP18KT06 | • <b>Product Development and Design</b>  |    |   |    | 3 |  | cr     |
| MAP18MO   | <b>Engine Technology</b>   |    |   | 10 | 5 |  | 15 cr  |
| MAP18MO01 | • <b>Engine Technology</b>   |    |   | 5  |   |  | 5 cr   |
| MAP18KT02 | • <b>Strength of Materials 1</b><br><i>See Matrix</i>  |    | 3 |    |   |  | 3 cr   |
| MAP18KT04 | • <b>Machine Elements 1</b><br><i>See Matrix</i>   |    | 3 |    |   |  | 3 cr   |
| MAP18MO04 | • <b>Engine Technical Laboratory Work</b>  |    |   | 4  |   |  | 4 cr   |
|           | <b>Choose one of the following two study modules:</b>  |    |   |    |   |  | cr     |
| MAP18PT   | <b>Manufacturing Technology</b>  | 3  | 9 |    | 3 |  | 15 cr  |

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| MAP18PT01 | • <b>Manufacturing Technology</b><br><i>See Matrix</i> | 3 |    |    |    | 3 cr  |
| MAP18PT02 | • <b>CNC Programming</b>                               |   | 6  |    |    | 6 cr  |
| MAP18PT03 | • <b>Measuring Technology</b><br><i>See Matrix</i>     |   | 3  |    |    | 3 cr  |
| MAP18PT04 | • <b>3D Manufacturing Technology</b>                   |   |    |    | 3  | 3 cr  |
| MAP18ET   | <b>Energy Technology</b>                               |   | 15 |    |    | 15 cr |
| MAP18ET01 | • <b>Applied Thermodynamics</b>                        |   | 4  |    |    | 4 cr  |
| MAP18ET02 | • <b>Streaming and Heat Transport</b>                  |   | 3  |    |    | 3 cr  |
| MAP18ET03 | • <b>Energy Technical Laboratory Works</b>             |   | 5  |    |    | 5 cr  |
| MAP18ET04 | • <b>Operation and Process Economic</b>                |   | 3  |    |    | 3 cr  |
| PRE18MF   | <b>Marketing and Sales</b>                             |   | 15 |    |    | 15 cr |
| PRE18MF01 | • <b>Marketing</b>                                     |   | 5  |    |    | 5 cr  |
| PRE18MF02 | • <b>Export Marketing</b>                              |   | 4  |    |    | 4 cr  |
| PRE18MF03 | • <b>Technical Sales</b>                               |   | 3  |    |    | 3 cr  |
| PRE18MF04 | • <b>Customer Analytics</b>                            |   | 3  |    |    | 3 cr  |
| PRE18EK   | <b>Advanced Economics</b>                              |   | 15 |    |    | 15 cr |
| PRE18EK01 | • <b>Advanced Cost and Benefit Analysis</b>            |   | 3  |    |    | 3 cr  |
| PRE18EK02 | • <b>Bookkeeping</b>                                   | 3 |    |    |    | 3 cr  |
| PRE18EK03 | • <b>Accounting</b>                                    | 3 |    |    |    | 3 cr  |
| PRE18EK04 | • <b>Corporate Finance</b>                             |   | 6  |    |    | 6 cr  |
| PRE18PP   | <b>Production</b>                                      |   |    | 15 |    | 15 cr |
| PRE18PP01 | • <b>Production Planning</b>                           |   |    | 5  |    | 5 cr  |
| PRE18PP02 | • <b>Purchasing</b>                                    |   |    | 4  |    | 4 cr  |
| PRE18PP03 | • <b>Logistics</b>                                     |   |    | 3  |    | 3 cr  |
| PRE18PP04 | • <b>Production Simulation</b>                         |   |    | 3  |    | 3 cr  |
| PRE18AF   | <b>Business Development</b>                            |   |    |    | 15 | 15 cr |
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| PRE18AF01 | • <b>Macroeconomics, Globalization and Networks</b>  |    |    |    |    | 4  |  | 4 cr  |
| PRE18AF02 | • <b>Project Management</b>  |    |    |    |    | 4  |  | 4 cr  |
| PRE18AF03 | • <b>Strategic Management</b>  |    |    |    |    | 3  |  | 3 cr  |
| PRE18AF04 | • <b>Circular Economy and Technology Assessment</b>  |    |    |    |    | 4  |  | 4 cr  |
| Val       | <b>Elective Studies</b><br><i>De valfria studierna är studiehelheter eller kurser som den studerande kan välja fritt, men innehållet ska stöda den studerandes professionella tillväxt. De valfria studierna ska vara högskolestudier (Examensstadgan §9).</i> |    |    |    |    |    |  | 15 cr |
| PRE18VAL  | <b>Elective Studies</b>  |    |    |    |    |    |  | 15 cr |
| Pra       | <b>Practical Training</b>  |    |    |    |    |    |  | 30 cr |
| PRE18PRA  | <b>Practical Training</b>  |    | 10 | 10 | 10 |    |  | 30 cr |
| PRE18PRA1 | • <b>Practical Training 1</b>  | 10 |    |    |    |    |  | 10 cr |
| PRE18PRA2 | • <b>Practical Training 2</b>  |    | 10 |    |    |    |  | 10 cr |
| PRE18PRA3 | • <b>Practical Training 3</b>  |    |    | 10 |    |    |  | 10 cr |
| EXA       | <b>Degree Thesis</b>   |    |    |    |    |    |  | 15 cr |
| PRE18EXA  | <b>Bachelor Thesis</b>   |    |    |    |    | 15 |  | 15 cr |