

## KTH courses for Spring 2018 in Mechanical Science and Engineering:

- 1. Introduction to Energy Systems Analysis and Applications (MJ2380)**  
<http://www.kth.se/student/kurser/kurs/MJ2380?l=en>  
Preapproved: Free elective, 9 ECTS = 4.5 hours  
Duration: Period 3  
Recommended prerequisites: ECON 102
- 2. Energy Management (MJ2410)**  
<http://www.kth.se/student/kurser/kurs/MJ2410?l=en>  
Preapproved: Free elective, 6 ECTS = 3 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME 300
- 3. Renewable Energy Technology, Advanced Course (MJ2412)**  
<http://www.kth.se/student/kurser/kurs/MJ2412?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: NPRE 201
- 4. Applied Refrigeration and Heat Pump Technology (MJ2423)**  
<http://www.kth.se/student/kurser/kurs/MJ2423?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201
- 5. Computational Methods in Energy Technology (MJ2424)**  
<http://www.kth.se/student/kurser/kurs/MJ2424?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME 310, ME 320
- 6. Applied Heat and Power Technology (MJ2426)**  
<http://www.kth.se/student/kurser/kurs/MJ2426?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201
- 7. Modeling of Energy Systems - Energy Utilization (MJ2437)**  
<http://www.kth.se/student/kurser/kurs/MJ2437?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201
- 8. Modeling of Energy Systems - Heat and Power Generation (MJ2438)**  
<http://www.kth.se/student/kurser/kurs/MJ2438?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 4  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201
- 9. Energy Planning and Applications (MJ2472)**  
<http://www.kth.se/student/kurser/kurs/MJ2472?l=en>  
Preapproved: Free elective, 9 ECTS = 4.5 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201

10. **Hydropower - Technology, Economy, Sustainability (ME2083)**  
<http://www.kth.se/student/kurser/kurs/ME2083?l=en>  
Preapproved: MechSE elective, 7.5 ECTS = 3.75 hours  
Duration: Period 3  
Recommended prerequisites: ME 310, NPRE 201
11. **Transformation in Energy Systems and Industries (ME2085)**  
<http://www.kth.se/student/kurser/kurs/ME2085?l=en>  
Preapproved: Free elective, 6 ECTS = 3 hours  
Duration: Periods 3  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201
12. **Energy Business (ME 2087)**  
<http://www.kth.se/student/kurser/kurs/ME2087?l=en>  
Preapproved: Technical elective, 6 ECTS = 3 hours  
Duration: Period 4  
Recommended prerequisites: ECON 102, BADM 310
13. **Introduction to Biomechanics (SE2121)**  
<https://www.kth.se/student/kurser/kurs/SE2121?l=en>  
Preapproved: MechSE elective, 9 ECTS = 4.5 hours  
Duration: Period 4  
Recommended prerequisites: TAM 251, ME 471
14. **Testing Techniques in Solid Mechanics (SE2123)**  
<https://www.kth.se/student/kurser/kurs/SE2123?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: TAM 251, ME 471
15. **Fracture Mechanics and Fatigue (SE2129)**  
<https://www.kth.se/student/kurser/kurs/SE2129?l=en>  
Preapproved: MechSE elective, 9 ECTS = 4.5 hours  
Duration: Period 3  
Recommended prerequisites: TAM 251, ME 471
16. **Dynamic Problems in Solid Mechanics (SE2134)**  
<https://www.kth.se/student/kurser/kurs/SE2134?l=en>  
Preapproved: MechSE elective, 7.5 ECTS = 3.75 hours  
Duration: Period 4  
Recommended prerequisites: TAM 251, ME 471
17. **Matlab (SD1105)**  
<https://www.kth.se/student/kurser/kurs/SD1105?l=en>  
Preapproved: Free elective, 3 ECTS = 1.5 hours  
Duration: Period 3 or 4  
Recommended prerequisites: Math 125 or Math 415
18. **Flow Acoustics (SD2155)**  
<https://www.kth.se/student/kurser/kurs/SD2155?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: Math 241 and/or Math 285, TAM 210 or TAM 211, TAM 335
19. **Numerical Methods for Acoustics and Vibration (SD2175)**  
<https://www.kth.se/student/kurser/kurs/SD2175?l=en>  
Preapproved: MechSE elective, 9 ECTS = 4.5 hours

Duration: Period 4

Recommended prerequisites: Math 215 and/or Math 241 and/or Math 286, TAM 210 or TAM 211 and/or TAM 212 and/or TAM 251

20. **Ground Vehicle Dynamics, Basic Course (SD2225)**  
<https://www.kth.se/student/kurser/kurs/SD2225?l=en>  
Preapproved: MechSE elective, 11 ECTS = 5.5 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: TAM212
21. **Applied Vehicle Dynamics Control (SD2231)**  
<https://www.kth.se/student/kurser/kurs/SD2231?l=en>  
Preapproved: MechSE elective, 7.5 ECTS = 3.75  
Duration: Period 4  
Recommended prerequisites: TAM212
22. **Rail Vehicle Dynamics (SD2313)**  
<https://www.kth.se/student/kurser/kurs/SD2313?l=en>  
Preapproved: MechSE elective, 8 ECTS = 4 hours  
Duration: Period 3  
Recommended prerequisites: TAM212, CS101
23. **Fibre Composites - Analysis and Design (SD2413)**  
<https://www.kth.se/student/kurser/kurs/SD2413?l=en>  
Preapproved: TAM 428, 6 ECTS = 3 hours  
Duration: Period 4  
Recommended prerequisites: ME330
24. **Dynamics and Motion Control (MF2007)**  
<https://www.kth.se/student/kurser/kurs/MF2007?l=en>  
Preapproved: Tech elective, 9 ECTS = 4.5 hours  
Duration: Period 3  
Recommended prerequisites: ME360
25. **Systems Engineering (MF2011)**  
<https://www.kth.se/student/kurser/kurs/MF2011?l=en>  
Preapproved: Tech elective, 9 ECTS = 4.5 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME270
26. **Robust and Probabilistic Design (MF2024)**  
<https://www.kth.se/student/kurser/kurs/MF2024?l=en>  
Preapproved: Tech elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: ME270, STAT400
27. **Design and Characterisation of Nano- and Microdevices (IH2655)**  
<https://www.kth.se/student/kurser/kurs/IH2655?l=en>  
Preapproved: MechSE elective, 7.5 ECTS = 3.75 hours  
Duration: Period 3  
Recommended prerequisites: PHYS 212
28. **Thermal Turbomachinery (MJ2430)**  
<https://www.kth.se/student/kurser/kurs/MJ2430?l=en>  
Preapproved: Technical elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: ME 300, TAM 335 or ME 310,

29. **Large Scale Solar Power (MJ2500)**  
<https://www.kth.se/student/kurser/kurs/MJ2500?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Periods 3 and 4  
Recommended prerequisites: ME 300, NPRE 201
30. **Solar Energy Systems for Buildings and Cities (MJ2501)**  
<https://www.kth.se/student/kurser/kurs/MJ2501?l=en>  
Preapproved: Technical elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: ME 300, ME 310, ME 320, NPRE 201
31. **Introduction to Noise Control (SD2110)**  
<https://www.kth.se/student/kurser/kurs/SD2110?l=en>  
Preapproved: Free elective, 3 ECTS = 1.5 hours  
Duration: Period 3 or 4  
Recommended prerequisites: Math 241 and/or Math 285, TAM 210 or TAM 211
32. **Fibre Composites – Materials and Manufacturing (SD2414)**  
<https://www.kth.se/student/kurser/kurs/SD2414?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 3  
Recommended prerequisites: ME 330
33. **Advanced Design of Welded Structures (SD2420)**  
<https://www.kth.se/student/kurser/kurs/SD2420?l=en>  
Preapproved: MechSE elective, 6 ECTS = 3 hours  
Duration: Period 4  
Recommended prerequisites: ME 270, ME 330
34. **Rapid Prototyping (MF2092)**  
<https://www.kth.se/student/kurser/kurs/MF2092?l=en>  
Preapproved: Free elective, 3 ECTS = 1.5 hours  
Duration: Period 3  
Recommended prerequisites: ME 170