

Renewable Energy

Personnel:

Dr. MER J. van Herle, ME A2 392, jan.vanherle@epfl.ch

Prof. S. Haussener: ME D0 2926, sophia.haussener@epfl.ch

Assistants:

Part Haussener: Xiaoyu Dai: xiaoyu.dai@epfl.ch

Shuo Liu: shuo.liu@epfl.ch

Part van Herle: Hossein Pourrahmani: hossein.pourrahmani@epfl.ch

Samaneh Daviran: samaneh.daviran@epfl.ch

Language:

English

References:

- David McKay, Sustainable Energy – without the hot air, UIT Cambridge (available on web)
- Kreith and Goswami, editors, Handbook of energy efficiency and renewable energy, Taylor and Francis Group, 2007.

Time and location:

Lecture Tuesday, 10:15-12:00, webinar link for lecture: <https://epfl.zoom.us/j/89140561762>

Exercise Tuesday, 12:15-13:00, Meeting link for exercise: <https://epfl.zoom.us/j/84777782003>

Exam:

Written exam in exam period; closed books, only calculator and 10 A4 pages (single sided, or 5 pages double sided) personal summary can be used

Course:

- Material online: moodle.epfl.ch
- Syllabus:

	Lecture Wednesday (10:15-12:00)	Lecturer	Exercise Tuesday (12:15-13:00)
Week 1 (23. 2)	Introduction	SH	Exercise 1
Week 2 (2.3)	Power cycles, ORC, co-generation	SH	Exercise 2
Week 3 (9.3)	Geothermal	SH	Exercise 3
Week 4 (16.3)	Solar thermal	SH	Exercise 4
Week 5 (23.3)	Biomass	JvH	Exercise 5
Week 6 (30.3)	Biomass	JvH	Exercise 6
Week 7 (13.4)	Wind	JvH	Exercise 7
Week 8 (20.4)	Wind	JvH	Exercise 8
Week 9 (27.4)	Solar electricity	SH	Exercise 9
Week 10 (4.5)	Hydrogen	JvH	Exercise 10
Week 11 (11.5)	Solar fuels	SH	Exercise 11
Week 12 (18.5)	Electrochemical and thermo-electrical conversion	JvH	Exercise 12
Week 13 (25.5)	Storage	SH	Exercise 13
Week 14 (1.6)	Ocean, tidal and wave	JvH	Exercise 14