

## Turbomachinery Course – TU Delft Online

### Course content:

- General introduction to turbo machinery, theory (cycles/fluid dynamics), application to hydraulic turbomachinery
- Gas turbines: cycle, combustion, controls
- Mechanical and Material aspects

**Teachers:** Prof. Sikke Klein, Dr Rene Pecnik, Dr Vera Popovich

### Participation for SGO members:

- Option 1: Active participation in classes
- Option 2: Exam and homework assignments (4 times)

	Date	Time	Content	Location	
Tuesday	10 november 2020	15:45-17:45	Introduction	On line	S. Klein/R. Pecnik
Friday	13 november 2020	8:45-10:45	Cycles	On line	R. Pecnik
Tuesday	17 november 2020	15:45-17:45	Velocity triangles + Euler	On line	R. Pecnik
Friday	20 november 2020	8:45-10:45	3d +radial	On line	R. Pecnik
Tuesday	24 november 2020	15:45-17:45	Choking + Nozzles + losses	On line	R. Pecnik
Friday	27 november 2020	8:45-10:45	Hydraulic turbomachinery	On line	S. Klein
Tuesday	1 december 2020	15:45-17:45	Application of pump, compressors. Maps (stall, surge, NPSH etc)	On line	S. Klein
Friday	4 december 2020	8:45-10:45	Gas turbine overview	On line	S. Klein
Tuesday	8 december 2020	15:45-17:45	Performance and application	On line	S. Klein
Friday	11 december 2020	8:45-10:45	Combustion	On line	S. Klein
Tuesday	15 december 2020	15:45-17:45	Mechanical and Material aspects I	On line	V. Popovich
Friday	18 december 2020	8:45-10:45	Mechanical and Material aspects II	On line	V. Popovich
<b>CHRISTMAS HOLIDAYS</b>					
Tuesday	5 januari 2021	15:45-17:45	Controls	On line	S. Klein
Friday	8 januari 2021	8:45-10:45	Preparation for exam	On line	R. Pecnik/S. Klein
Monday	25 januari 2021	9:00-12:00	Turbomachinery exam	On line	