

# Stability of Structures

Course for the Engineering Mechanics graduate school

<b>Thu Oct 5, 2023</b>		
10h00-10h45	Introduction to buckling	Fred van Keulen
10h45-11h00	Coffeebreak	
11h00-12h00	Preliminaries	Fred van Keulen
12h00-13h00	Lunch	
13h00-14h45	Buckling of arbitrary systems	Fred van Keulen
14h45-15h00	Coffeebreak	
15h00-17h00	Buckling of arbitrary systems and exercise	Fred van Keulen
<b>Fri Oct 6, 2023</b>		
9h00-10h45	Introduction to initial post buckling	Fred van Keulen
10h45-11h00	Break	
11h00-12h00	Introduction to initial post buckling	Fred van Keulen
12h00-13h00	Lunch	
13h00-14h45	Exercise	Fred van Keulen/Frans van der Meer
14h45-15h00	Break	
15h00-17h00	Exercise	Fred van Keulen/Frans van der Meer

<b>Mon Oct 9, 2023</b>		
9h00-11h00	Buckling of stiffened panels	Carey Walters
11h00-11h15	Break	
11h15-12h15	Topology optimization under buckling constraints	Matthijs Langelaar
12h15-13h00	Lunch	
13h00-14h45	Buckling and residual stress in MEMS/NEMS	Hans Goosen
14h45-15h00	Break	
15h00-17h00	Experiment	Hans Goosen
<b>Tue Oct 10, 2023</b>		
9h00-10h45	Geometrically nonlinear finite element formulation	Frans van der Meer
10h45-11h00	Break	
11h00-12h00	Newton-Raphson algorithms, path following techniques	Frans van der Meer
12h00-13h00	Lunch	
13h00-14h45	Linear buckling analysis	Frans van der Meer
14h45-15h00	Break	
15h00-17h00	Computer exercise	Frans van der Meer
<b>Wed Oct 11, 2023</b>		
9h00-10h45	Theory on geometrically nonlinear plastic collapse	Frans van der Meer
10h45-11h00	Break	
11h00-12h00	Theory on geometrically nonlinear plastic collapse	Frans van der Meer
12h00-13h00	Lunch	
13h00-14h45	Background and demonstration computer code for exercise	Frans van der Meer
14h45-15h00	Break	Frans van der Meer
15h00-17h00	Exercise with analytical and FE calculation	Frans van der Meer