

Underwater Technology Specialization Subject TMR4585 - 2019

Course plan

Possible Lecture times:

- Thursdays 14:15 – 16:00 – Room:T3

Date	Content	Material	
29.08	Introduction, Pipeline material selection and wall thickness design		SS
05.09.	Pipeline installation construction and welding, hydrodynamic stability		SS
12.09.	Pipeline heat transfer, thermal buckling behaviour and free span issues		SS
26.09.	Fieldworks Gunnerus		ML
03.10	Seabed mapping I	App note CARIS Survey handbook	ML*
10.10	Seabed mapping II	Ludvigsen 2010 Survey handbook	ML
17.10	Underwater navigation	Ludvigsen 2010 Hegrenes 2010 Liam 2014 Anonsen 2013 Kebkal 2013 Survey handbook	ML
24.10.	Data processing / Error propagation and analyses for underwater navigation and seabed mapping	B. Jalving Horizontal accuracy Jalving 1999 Gade 2005 Offshore survey handbook	ML
31.10	Path planning		ML*
07.11	Path planning II / obstacle avoidance		ML
14.11	Autonomy Models Architecture for deliberate control		ML
21.11	Mission management systems AUVs a. DUNE/ROS Project presentation and hand in		ML
28.11	Oral exam/project defence		ML/SS

ML: Martin Ludvigsen

SS: Svein Sævik