

Title	Introduction to Offshore Engineering	Year/Semester	2018/Fall
Outline			
Offshore Plant means that all facilities to produce, transport, and store energy media in a broad sense. In this class, We will focus on the background knowledge required to understand an offshore platform using for production, transportation, and storage of oil and gas. In detail, we will study about a reservoir, subsea well, subsea pipeline system, offshore structure, topside process, oil tanker and LNG carrier. . Also we will see the concept of renewable energy produced from offshore using wind, wave, tidal, current, and thermal energy.			
Text book			
Project reports			
Lecture plan			
1 week	Course outline		
2 week	Offshore projects & Reservoir fluids characterization		
3 week	Subsea production system		
4 week	Flow Assurance		
5 week	Subsea flowline installation		
6 week	Oil FPSO, LNG FPSO, LNG carrier, and gas processing		
7 week	Offshore platforms		
8 week	Midterm exam		
9 week	Phase equilibrium for separator design		
10 week	Separator and slug catcher design		
11 week	Economic analysis of offshore projects using Questor		
12 week	Topside process design (Case studies)		
13 week	Term project presentation (1)		
14 week	Term project presentation (2)		
15 week	Final exam		