

## Master Thesis Brief Description

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<b>Thesis Title</b>	<b>Modelling and Simulation of Naturally Fractured Oil Reservoir Using BOAST- NFR</b>
<b>Programme of Studies</b>	MSc in Oil and Gas and Offshore Engineering
<b>Course</b>	MOE 518 Master Thesis
<b>Area of Study</b>	Processes Modelling and Simulation
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<b>Supervisor</b>	Dr.-Ing. Paris A. Fokaides, V. Lecturer, Civil Engineering Department
<b>Supervisory Committee</b>	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr Antonis Papadakis, Ass. Professor, Electrical Engineering Department
<b>Semester</b>	-
<b>Short Description</b>	This thesis described naturally fractured oil reservoir models and structures. The Black Oil Applied Simulation Tool (BOAST) for a Naturally Fractured Reservoirs was used to calculate oil and gas volumes in place; Gas Initially In Place (GIIP) and Oil Initially In Place (OIIP); to predict the future performance of a reservoir based on its current state and past performance. BOAST-NFR is a cost-effective reservoir simulation tool for the study of such problems as primary depletion, pressure maintenance and basic secondary recovery operations in a naturally fractured black oil reservoir. Well Data from the Seventh SPE Comparative Solution Project (Modeling of Wells in Reservoir Simulation) were used in the modelling and simulation of the BOAST – NFR. After a successful configuration of data and simulation, results were obtained; material balance report was written during the first iteration and a summary report spreadsheet showing output data for the field every NDT (100 time-steps).