

## Master Thesis Brief Description

---

<b>Thesis Title</b>	<b>East Med Pipeline Project</b>
<b>Programme of Studies</b>	MSc in Sustainable Energy Systems
<b>Course</b>	MES 580 MSc Thesis
<b>Area of Study</b>	Process Engineering
<b>Student's Name</b>	Antonis Konstantinou
<b>Students Reg. Number</b>	12969
<b>Supervisor</b>	Dr.-Ing. Paris A. Fokaides, Assoc. Professor, Mechanical Engineering Department
<b>Supervisory Committee</b>	Dr Chris Christodoulou, Professor, Mechanical Engineering Department Dr. George Karagiorgis, Professor, Mechanical Engineering Department
<b>Semester</b>	Fall Semester 2022
<b>Short Description</b>	<p>This master thesis delves into the complexities of liquefied natural gas (LNG) infrastructure projects, emphasizing the critical role of project management due to the intricate technology, significant costs, and remote locations of liquefaction facilities. These projects necessitate the procurement of equipment and materials from multiple countries, entailing coordination with various supply chain elements such as feed gas pipelines and gas liquefaction plants. The involvement of numerous contractors, subcontractors, suppliers, and service firms worldwide calls for diverse, multicultural labor teams and substantial project financing from financial institutions. Despite having skilled project team members and well-defined management procedures, successfully completing large LNG projects on time and within budget remains challenging. The study also evaluates the impact of the EastMed pipeline development on Europe's energy security, providing diversified routes and sources while fostering direct connections to producing regions. For Cyprus, joining the European gas grid through this project promises enhanced gas trade in the south-east European region. Additionally, the project is expected to bolster Cyprus and Greece's economies, creating a stable market for gas exports and facilitating the establishment of gas trading hubs in Greece and Italy, thereby promoting gas trading in South-East Europe.</p>