

*Optimization - Using Mathematical Tools and Numerical Methods
in Solving of Engineering Problems*

Study Area: Applied Mathematics, Numerical Methods

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Abstract: The optimization in engineering is closely related to design and coming up with the best solution. The aim of this lecture is to show possibilities of using mathematics tools and numerical methods to determine the dimensions of a small cylindrical tank to transport of a fluid toxic waste. We will mainly focus on the minimization of the cost of the tank with respect to the fixed constraints.

Keywords: optimization, engineering, design, numerical methods, transport, toxic waste