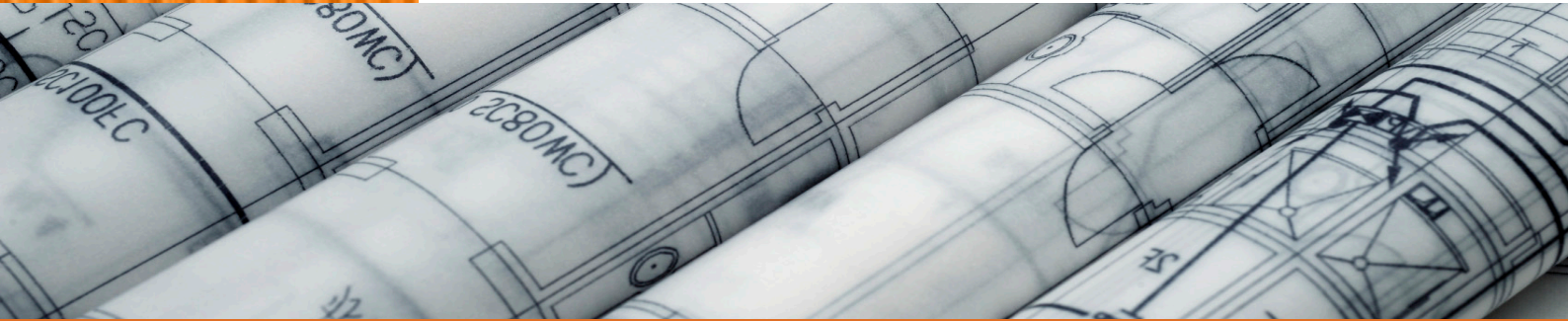


# Estimating of Engineering



## Course summary

The Estimating of Engineering course of the Cost Engineering Academy focuses on estimating the cost of the actual engineering work. Engineering not only defines the cost of your project by the design that is made, but the engineering process in itself is part of your project cost as well. This course focuses on estimating those engineering cost. It will help you keep the cost down for your engineering phases, but as a result you can also prevent budget overruns.

During the Estimating of Engineering course you will start by gaining a deeper understanding about the position of engineering within a project. You will also look into the buildup of the costs of engineering for each discipline. Attention will then turn to the development of the engineering resources required within the various project phases. A clear understanding of these steps allows you to move on to study the different methods that are available to estimate the engineering work. These methods will not only be studied in depth, but you will also be challenged to use these methods on the cases that will be presented during the course.

After this course you will know how to identify major cost risks of engineering. Together with the estimating methods this means you will be able to estimate the engineering involved in your projects. This course is also useful if you want to improve on your present estimating skills or if you want to validate the engineering estimates of others.

## What you will learn

Estimating of engineering

- Understanding engineering activities
- The terminology used within engineering
- Understanding the engineering organization
- The type of costs for an engineering company
- Understanding different studies, eg HAZOP, HSE, SIL

Engineering effort in engineering phases

- Feasibility
- Basic engineering
- Detail engineering

Methods of estimating engineering

- Based on factors
- Based on metrics
- Miller method
- Guthrie method
- Clark / Lorenzoni method

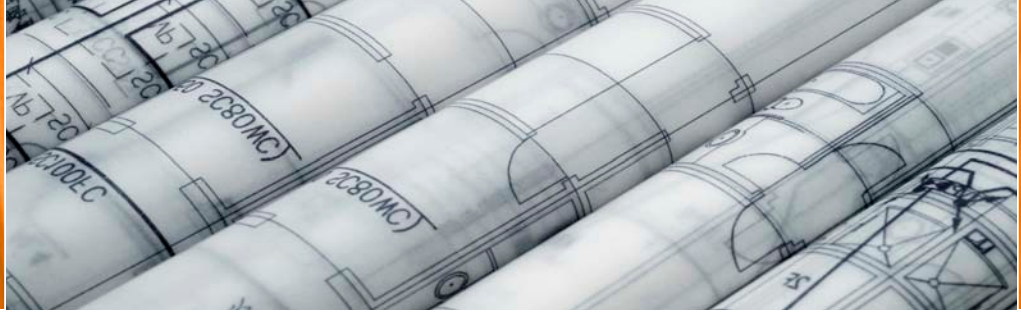
Detailed approach per discipline; based on identified activities and deliverables

Cases

- Estimating techniques
- Estimating methods

Each case will focus on applying the different methods for each phase.





# Estimating of Engineering Course

## Who should attend

This course is suitable for everyone who is part of a team which executes industrial projects. If possible, groups will be composed of organizations that are supplementing each other to allow all participants to learn as much as possible. This course is aimed at:

- Project manager
- Project engineer
- Cost estimator
- Project cost engineer
- Discipline leads
- All who are involved in technical projects, cost estimation, cost control and planning and contract review in their organizations

## Requirements

You will have to have a basic understanding of cost engineering and estimating. In addition, you will need to have a basic understanding of technical projects. For this reason, it is advised to have attended the introduction course cost engineering and the estimating course by the Cost Engineering Academy.

## Course duration

The duration of this course is one day.

## Course dates and locations

See [www.costengineering.eu/academy](http://www.costengineering.eu/academy) for course dates.

## Course price

Course price: Visit [www.costengineering.eu/academy/registration](http://www.costengineering.eu/academy/registration)

Course materials: Included

Drinks and lunch: Included



**COST ENGINEERING**

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