

Course Package

Process design (Designing)

Name module	Physical Transport/Transport Phenomena
Educational programme	BSc Chemical Engineering
Period	Second quartile of the second semester (Quarter 2B)
Study load	15 ECTS
Coordinator	M.A. Stehouwer

Physical Transport/Transport Phenomena			
Quarter 1A	Quarter 1B	Quarter 2A	Quarter 2B
			Intro. Chemical Reaction Engineering (4 EC)
			Intro. Separation Methods (4 EC)
			Project Process Design (7 EC)

Required preliminary knowledge: Basic course in Process Engineering/Design (Mass Balance, Energy Balance, Heat Exchanger, Distillation, CSTR and PFR Reactors). Preferred knowledge: Programming Skills (Matlab).

In this module you get started with reactor technology and separation techniques. In order to design a process, you have to know everything about its basic operations. For example, the core of a process is the reactor. In the reactor the raw material is converted into the desired product, with a certain conversion and selectivity. The reactor does not just produce the desired product, but also raw materials, by-products and (sometimes) solvents. This mixture has to be separated, so that you can obtain products and the raw materials with the desired purity. This means you must also know all about separation steps based on different techniques. This module covers all of these topics. Again, you get to apply all the knowledge you have gained in a project.

The modules are tentative and subject to change. Please check [the website](#) regularly.