ChE-451  Process development I
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Summary
Familiarize the students with integrated process development and industrial technologies.

Content
Process analysis and description
• Development strategies
• Mass and energy balances
• Industrial equipments
• Installation concepts
• Technical limitations
• Sizing of industrial equipments
• Energy use
• Introduction to steam process
• Design of technical equipment
• Economical estimations (total product & investment costs)

Optimization
• Influence of process modifications
• Risk analysis introduction
• Optimum choice
• Development program definition
• Use of process simulation software
• Scale down and scale up

Resources
Ressources en bibliothèque
• Ajouter au Panier Systematic methods of chemical process design / Biegler
• Process development / Vogel
• Ullmann's Encyclopedia of Industrial Chemistry
• Scale-up in chemical engineering / Zlorkarnik

Websites
• http://scgc.epfl.ch/telechargement_cours_chimie.htm