

Code	IE532
Name	Stochastic Programming
Hour per week	3 (3 + 0)
Credit	3
ECTS	10
Level/Year	Graduate
Semester	Fall or Spring
Type	Elective
Prerequisites	IE511, IE521
Content	This course is designed to teach optimization in the face of uncertainty. Specifically, it presents a thorough introduction to modeling, and computational methods of stochastic programming. The course also provides how to formulate and solve the deterministic equivalent of stochastic programming problems. The course is designed to discuss extensions to problems with probabilistic constraints, stochastic integer programs and multi-stage stochastic programs. The solution methods to those problems are also discussed such as the L-Shaped method. This course also provides stochastic decomposition and variance reduction techniques.