Application Domains

Manufacturing / Logistics systems	Healthcare / Public / Service	Risk management / Financial systems

System Innovation | **System Design** | **System Engineering** | **System Management**

Methodologies

Optimization

Math. Programming
- Convex opt.
- Combinatorial opt.
- IP, MILP
DP / MDP / POMDP
- decision / control
Heuristic / Meta-heuristic
...

Statistic/Stochastic

Data science
Data driven decision
Stochastic process
Queueing model
Quality engineering
Design of experiment
Bayesian / MCMC
...

Complex Sys. Mod.

Discrete event M & S
Monte Carlo simulation
Opt. via simulation
Design of simulation exp.
Simulation based control
Geometric modeling
Design methodology
...

As of year 2014, the department has 16 full-time faculty members, 6 emeritus professors, 4 joint appointment, and 2 invited guest professors. The department is continually recruiting new faculty members to reach 25 faculty members.

The department offers undergraduate, master and doctoral programs. The average numbers of undergraduate, master, and doctoral students each year are 40~50, 30~40, and 10~20, respectively. The graduates are working at almost every industry and research institutes. There are many successful graduates, including many CEOs and senior directors, especially in leading companies for consulting, information services, electronics & high-tech manufacturing, telecommunication/mobile communication services, and financial & investment services, national research institutes, and the government.