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# ENTIRE EDIH

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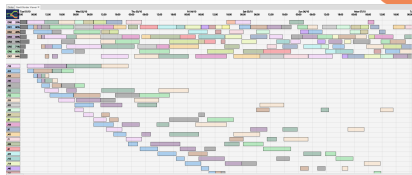
## Skills Development Program



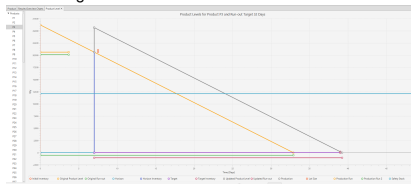
# Constraint Based Scheduling



- First iteration run last week
- Presentation of problem constraints
- A generic scheduling tool
- Visualization techniques
- Industrial case studies
- Future iterations on demand



Scheduling Tool: Machine and Job Gantt Chart

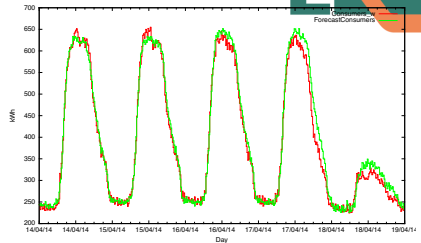


Production Planning Example

# Energy Cost Management



- How to exploit time variable energy prices
- Using energy storage
- Predicting production, demand and prices
- Case studies

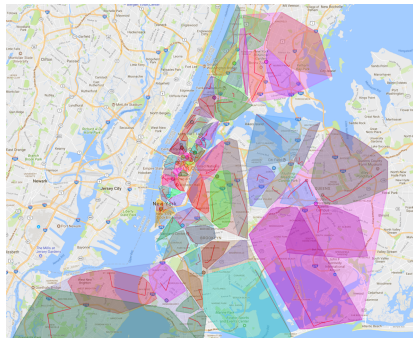


Predicting UCC Campus Electricity Demand  
Hourly Irish Wholesale Electricity Price



Time Variable Electricity Price

- Problem types
  - Tour limited
  - Capacity limited
  - On-line problems
- Predicting travel times
- Industrial case studies
  - Scheduling maintenance visits
  - Car transport in Ireland

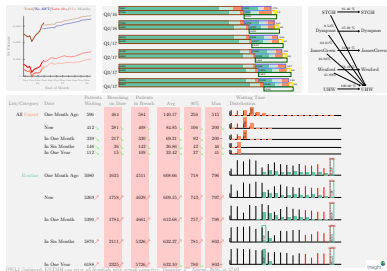


Elevator Maintenance Planning in NYC

# Rostering and Personnel Assignment



- Problem types
  - Rostering
  - Timetabling
  - Capacity planning
- Solution methods
- Case studies



Outpatient Capacity Planning Dashboard