

Mining and process industries

- 6.1 Production of alloys**
- 6.2 Animal food production**
- 6.3 Refinery**
- 6.4 Cane sugar production**
- 6.5 Opencast mining**
- 6.6 Production of electricity**

Scheduling problems

- 7.1 Construction of a stadium**
- 7.2 Flow-shop scheduling**
- 7.3 Job Shop Scheduling**
- 7.4 Sequencing jobs on a bottleneck machine**
- 7.5 Paint production**
- 7.6 Assembly line balancing**

Planning problems

- 8.1 Planning the production of bicycles**
- 8.2 Production of drinking glasses**
- 8.3 Material Requirement Planning**
- 8.4 Planning the production of electronic components**
- 8.5 Planning the production of fiberglass**
- 8.6 Assignment of production batches to machines**

Loading and cutting problems

- 9.1 Wagon load balancing**
- 9.2 Barge loading**
- 9.3 Tank loading**
- 9.4 Backing up files**
- 9.5 Cutting sheet metal**
- 9.6 Cutting steel bars for desk legs**

Ground transport

- 10.1 Car rental
- 10.2 Choosing the mode of transport
- 10.3 Depot location
- 10.4 Heating oil delivery
- 10.5 Combining different modes of transport
- 10.6 Fleet planning for vans

Air transport

- 11.1 Flight connections at a hub
- 11.2 Composing flight crews
- 11.3 Scheduling flight landings
- 11.4 Airline hub location
- 11.5 Planning a flight tour

Telecommunication problems

- 12.1 Network reliability
- 12.2 Dimensioning of a mobile phone network
- 12.3 Routing telephone calls
- 12.4 Construction of a cabled network
- 12.5 Scheduling of telecommunications via satellite
- 12.6 Location of GSM transmitters

Economics and finance

- 13.2 Publicity campaign
- 13.3 Portfolio selection
- 13.4 Financing an early retirement scheme
- 13.5 Family budget
- 13.6 Choice of expansion projects
- 13.7 Mean variance portfolio selection

Timetabling and personnel planning

- 14.1 Assigning personnel to machines
- 14.2 Scheduling nurses
- 14.3 Establishing a college timetable

14.4 Exam scheduling

14.5 Production planning with personnel assignment

14.6 Planning the personnel at a construction site

Local authorities and public services

15.1 Water conveyance / water supply management

15.2 CCTV surveillance

15.3 Rigging elections

15.4 Gritting roads

15.5 Location of income tax offices

15.6 Efficiency of hospitals