Hard constraints

1. Overlap of subject

Soft constraints

1. Evenly distribution of subject(according to credit hour or priority)

random.choices()

A close-up of a text

Description automatically generated

A screenshot of a computer program

Description automatically generated

random.sample()

A white background with black text

Description automatically generated

A screenshot of a computer program

Description automatically generated

P=2

[[6, 3, 2, 4], [5, 3, 2, 1] ] [['MUL', 'BUSS', 'NP', 'TEL'], ['ELEX', 'BUSS', 'NP', 'ICT']]

[110, 011, 010, 100], [101, 011, 010, 001] if 000 or 111 flip 1 bit

[101,011,010,101]