# Hard constraints

### ConflictingLecturesDifferentCourseInSamePeriod

Two conflicting lectures (of different courses) in the same period.

Three conflicting lectures count as 3 violations: one for each pair.

### ConflictingLecturesSameCourseInSamePeriod

Two conflicting lectures (of the same course) in the same period.

Three conflicting lectures count as 3 violations: one for each pair.

### RoomOccupancy

Two lectures in the same room at the same period.

Any extra lecture in the same period and room counts as one more violation.

### UnavailablePeriodPenalty

Each lecture in a period unavailable for that course.

### RequiredRoomType

Course must take place in the room of the required type.

# Soft constraints

### RoomCapacity

For each lecture, the number of students that attend the course should be less or equal than the number of seats of all the rooms that host its lectures.

### MinimumWorkingDays

The lectures of each course should be spread into a minimum number of days.

### CurriculumCompactness

Lectures belonging to a curriculum should be adjacent to each other (e.g. in consecutive periods). For a given curriculum we account for a violation every time there is one lecture not adjacent to any other lecture within the same day.

### RoomStability

All lectures of a course should be given in the same room.

### PreferredDays

If set for course, lecture should take place on the preferred day(s).

### PreferredTimeslots

If set for course, lecture should take place in the preferred timeslot(s).