#### **Тема 21**

# Домашно 4 – База от данни за университет

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## 1. Релационен модел на данни (релационни схеми)

### Схемата на базата от данни се състои от следните релационни схеми:

Students(name, EGN, facultyNumber, major, yearOfStudying, facultyID, mentor)

Courses(name, courseNumber, year, type, description, teacherEGN)

Faculties(facultyName, <u>facultyID</u>, address)

Departments(<u>name</u>, <u>facultyID</u>, teacherEGN)

Teacher (name, <u>teacherEGN</u>, scientificTitle, departmentName)

Degrees (abbreviation, degreeName)

Attends(studentEGN, courseNumber, courseYear)

HasDegree(teacherEGN, abbreviation)

### 2. ФЗ и Нормализация

## За схемата на БД по-горе са в сила следните ФЗ:

- Φ3-1 <u>EGN</u> -> name, facultyNumber, major, yearOfStudying, facultyID, mentor (Students)
- Φ3-2 <u>courseNumber</u>, <u>year</u> -> name, type, description, teacherEGN (Course)
- Φ3-3 facultyID -> facultyName, address (Faculties)
- Φ3-4 <u>name</u>, <u>facultyID</u> -> teacherEGN (Departments)
- Φ3-5 <u>teacherEGN</u> -> name, scientificTitle, departmentName (Teachers)
- Φ3-6 abbreviation -> degreeName (Degrees)