Database Schema

# Entities

Course(code, credit, name, department)  
department -> Department.abbreviation

RestrictedCourse(code, maxStudents)  
code -> Course.code

Department(name, abbreviation)  
unique name

Branch(name, programme)  
programme -> Programme.name

Student(nationalID, schoolID, name, programme)  
programme -> Programme.name  
unique schoolID

Programme(name, abbreviation)

Classification(name)

# Relationships

prerequisite(course, requiredCourse)  
course -> Course.code  
requiredCourse -> Course.code

registeredOn(student, course)  
student -> Student.nationalID  
course -> Course.code

hasFinished(student, course, grade)  
student -> Student.nationalID  
course -> Course.code

hostedBy(programme, department)  
programme - > Programme.name   
department -> Department.abbreviation

programmeHasMandatory(programme, course)   
programme -> Programme.name  
course -> Course.code

branchHasMandatory(branch, programme, course)  
(branch, programme) -> Branch.(name, programme)  
course -> Course.code

hasRecommended(branch, programme, course)  
(branch, programme) -> Branch.(name, programme)   
course -> Course.code

studiesBranch(student, branch, programme)  
(programme, student) -> Student.(programme, nationalID)  
(branch, programme) -> Branch.(name, programme)

isOnWaitingList(student, course, queuePos)  
student -> Student.nationalID  
restrictedCourse -> RestrictedCourse.Code  
unique (course, queuePos)

hasClassification(course, classification)  
course -> Course.code  
classification -> Classification.name