Departments(<u>name</u>, abbr) abbr are UNEQUE

Programs(name)

 $\begin{aligned} & \text{Students}(\underline{\text{idnr}} \text{ , name, login, program}) \\ & \text{program} \rightarrow \text{programs.name} \end{aligned}$

 $\begin{aligned} & \text{Courses}(\underline{\text{code}}, \text{name, credits, department}) \\ & \text{department} \rightarrow \text{Departments.name} \end{aligned}$

Branches(<u>program</u>, <u>name</u>) program → Programs.name

 $Classifications (\underline{name})$

 $\begin{aligned} & \text{LimitedCourses}(\underline{code}, \, \text{capacity}) \\ & \text{code} \rightarrow \text{Courses.code} \end{aligned}$

DepartmentWork(<u>department</u>, <u>program</u>) department → Departments.name program → Programs.name

StudentBranches(student, program, branch) student → Students.idnr (branch, program) → Branches(name, program)

$$\label{eq:mandatoryBranch} \begin{split} & \mathsf{MandatoryBranch}(\underline{branch},\,\underline{program},\,\underline{course}) \\ & (\mathsf{branch},\,\mathsf{program}) \to \mathsf{Branches}(\mathsf{name},\,\mathsf{program}) \\ & \mathsf{course} \to \mathsf{Courses.code} \end{split}$$

MandatoryProgram(<u>program,course</u>)
program → Programs.name
course → Courses.code

 $\label{eq:RecommendedBranch(branch,program course)} RecommendedBranch(branch,program) \rightarrow Branches(name,program) course \rightarrow Courses.code$

Registered(<u>student</u>, <u>course</u>) student → Students.idnr course → Courses.code

Taken($\underline{\text{student}}$, $\underline{\text{course}}$, $\underline{\text{grade}}$) student \rightarrow Student.indr course \rightarrow Courses.code

 $\begin{aligned} & \text{WaitingList}(\underline{\text{student,course}}, \text{ position }) \\ & \text{student} \rightarrow \text{Student.idnr} \end{aligned}$

course → Courses.code

 $\begin{aligned} & \text{Prerequisites}(\underline{\text{course}}, \underline{\text{prerequisite}}) \\ & (\text{course}, \text{prerequisite}) \rightarrow \text{Courses}. \\ & \text{code} \end{aligned}$

 $\begin{aligned} & \text{Classified}(\underline{\text{course}}, \underline{\text{classification}}) \\ & \text{course} \rightarrow \text{Courses.code} \\ & \text{classification} \rightarrow \text{Classifications.name} \end{aligned}$