D(studentIdnr, studentName, login, branchName, programName, courseCode, courseName, credits, departmentName, capacity, classification, grade, position)

## FD (2)

studentIdnr -> studentName login branchName programName
courseCode -> courseName credits capacity departmentName
studentIdnr courseCode -> grade position
login -> studentIdnr
position courseCode -> studentIdnr

## **Decomposition (3)**

Attributes: courseCode courseName credits departmentName capacity

Keys: {courseCode}

Attributes: login studentIdnr studentName branchName programName

**Keys:** {studentIdnr}

{login}

Attributes: courseCode position studentIdnr grade

Keys: {courseCode studentIdnr}

{courseCode position}

Attributes: courseCode classification position
Keys: {courseCode classification position}

## MVD (4)

```
Attributes: courseCode classification position
Keys: {courseCode classification position}
```

courseCode ->-> classification
courseCode, studentIdnr ->-> position