## Schema

### Assumptions:

* Background is the professors teaching i.e. software, math, English, etc.
* Classes can in fact exist if there are no students or professors as it is its own entity
* The previous\_classes attribute stores classes that students have taken, including grades
* Any entity with more than one underlined attribute has a compound primary key

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Student** | | | | | |
| Student\_number | Email | Name | Program | CGPA | Required\_classes |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Takes** | | | | | | |
| Required\_classes | Current\_classes | Previous\_classes | Title | Id | Student\_number | Email |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Classes** | | | | | | |
| Title | Id | Grades | Prerequisites | Required\_classes | Prof\_id | Email |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Professor** | | | | | |
| Prof\_id | Email | Name | Background | Title | Id |

### Foreign Keys:

*Table* attribute -> *table* attribute

*Student* Required\_classes -> *Takes* Required\_classes

*Takes* Student\_number -> *Student* Student\_number

*Takes* Email -> *Student* Email

*Takes* Title -> *Classes* Title

*Takes* Id -> *Classes* Id

*Classes* Required\_classes -> *Takes* Required\_classes

*Classes* Prof\_id -> *Professor* Prof\_id

*Classes* Email -> *Professor* Email

*Professor* Id -> *Classes* Id

*Professor* Title -> *Classes* Title