

```
drop table prereq;
drop table time_slot;
drop table advisor;
drop table takes;
drop table student;
drop table teaches;
drop table section;
drop table instructor;
drop table course;
drop table department;
drop table classroom;
```

```
create table classroom
```

```
    (building          varchar(15),
     room_number      varchar(7),
     capacity          numeric(4,0),
     primary key (building, room_number)
    );
```

```
create table department
```

```
    (dept_name        varchar(20),
     building          varchar(15),
     budget            numeric(12,2) check (budget > 0),
     primary key (dept_name)
    );
```

```
create table course
```

```
    (course_id        varchar(8),
     title             varchar(50),
```

```
dept_name      varchar(20),
credits        numeric(2,0) check (credits > 0),
primary key (course_id),
foreign key (dept_name) references department
              on delete set null
);
```

create table instructor

```
(ID            varchar(5),
name           varchar(20) not null,
dept_name      varchar(20),
salary         numeric(8,2) check (salary > 29000),
primary key (ID),
foreign key (dept_name) references department
              on delete set null
);
```

create table section

```
(course_id     varchar(8),
sec_id         varchar(8),
semester       varchar(6)
              check (semester in ('Fall', 'Winter', 'Spring', 'Summer')),
year           numeric(4,0) check (year > 1701 and year < 2100),
building       varchar(15),
room_number    varchar(7),
time_slot_id   varchar(4),
primary key (course_id, sec_id, semester, year),
foreign key (course_id) references course
              on delete cascade,
```

```
foreign key (building, room_number) references classroom
    on delete set null
);
```

create table teaches

```
(ID          varchar(5),
 course_id   varchar(8),
 sec_id      varchar(8),
 semester    varchar(6),
 year        numeric(4,0),
 primary key (ID, course_id, sec_id, semester, year),
 foreign key (course_id, sec_id, semester, year) references section
    on delete cascade,
 foreign key (ID) references instructor
    on delete cascade
);
```

create table student

```
(ID          varchar(5),
 name        varchar(20) not null,
 dept_name   varchar(20),
 tot_cred    numeric(3,0) check (tot_cred >= 0),
 primary key (ID),
 foreign key (dept_name) references department
    on delete set null
);
```

create table takes

```
(ID          varchar(5),
```

```
course_id      varchar(8),
sec_id         varchar(8),
semester       varchar(6),
year           numeric(4,0),
grade         varchar(2),
primary key (ID, course_id, sec_id, semester, year),
foreign key (course_id,sec_id, semester, year) references section
            on delete cascade,
foreign key (ID) references student
            on delete cascade
);
```

create table advisor

```
(s_ID          varchar(5),
i_ID          varchar(5),
primary key (s_ID),
foreign key (i_ID) references instructor (ID)
            on delete set null,
foreign key (s_ID) references student (ID)
            on delete cascade
);
```

create table time\_slot

```
(time_slot_id  varchar(4),
day            varchar(1),
start_hr       numeric(2) check (start_hr >= 0 and start_hr < 24),
start_min      numeric(2) check (start_min >= 0 and start_min < 60),
end_hr         numeric(2) check (end_hr >= 0 and end_hr < 24),
end_min        numeric(2) check (end_min >= 0 and end_min < 60),
```

```
primary key (time_slot_id, day, start_hr, start_min)
);
```

```
create table prereq
```

```
(course_id          varchar(8),
 prereq_id          varchar(8),
 primary key (course_id, prereq_id),
 foreign key (course_id) references course
                on delete cascade,
 foreign key (prereq_id) references course
);
```