



CEA Database Schema

Department(dept_code, name)

Course(dept_code, courseno, area)

Course.dept_code \subseteq Department.dept_code

Covers(dept_code, courseno, topic)

(Covers.depCode, Covers.courseNo) \subseteq (Course.depCode, Course.courseNo)

Acquires(dept_code, courseno, skill)

(Acquires.depCode, Acquires.courseNo) \subseteq (Course.depCode, Course.courseNo)

Prereq(dept_code, courseno, dept_code_exc, courseno_exc)

(Prereq.dept_code, Prereq.courseno) \subseteq (Course.dept_code, Course.courseno)

(Prereq.dept_code_exc, Prereq.courseno_exc) \subseteq (Course.dept_code, Course.courseno)

Excludes(dept_code, courseno, dept_code_exc, courseno_exc)

(Excludes.dept_code, Prereq.courseno) \subseteq (Course.dept_code, Course.courseno)

(Excludes.dept_code_exc, Excludes.courseno_exc) \subseteq (Course.dept_code, Course.courseno)

Edition(eid, dept_code, courseno, start_date, end_date, offer_time, enrollno)

(Edition.dept_code, Edition.courseno) \subseteq (Course.dept_code, Course.courseno)

//***** eid here is the primary key for course editions that we added here because we need to refer to this table a lot, eid can make it easier to refer to rather than typing all (dept_code, courseno, start_date, end_date, offer_time). Type of eid is formed by its dept_code+courseno+season(F/S/Y based on start and end date)+offer_time(M/D/E based on time of the day): like CSC343FM/CSC309YE and it is unique. *****/

Student(sid, birth_month, birth_year, gender, country, start_month, start_year)

Takes(sid, eid, final_grade)

Takes.sid \subseteq Student.sid

Takes.eid \subseteq Edition.eid

Experiences(sid, eid, skill, skillBefore, skillAfter, overallSat, instrSat,
InterestBefore, InterestAfter)

(Experiences.sid, Experiences.eid) \subseteq (Takes.sid, Takes.eid)

Instructor(name, gender, age)

Expertises_instr(instr_name, expertise_area)

Expertises_instr.instrName \subseteq Instructor.name

Freelancer(name)

Freelancer.name \subseteq Instructor.name

FacultyMember(name, start_year)

FacultyMember.name \subseteq Instructor.name

FacultyTeacher(name)

[FacultyTeacher.name \subseteq Instructor.name]

FacultyResearcher(name)

FacultyResearcher.name \subseteq Instructor.name

InterestedIn(researcher_name, researcher_int)

InterestedIn.researcher_name \subseteq FacultyResearcher.name

Teaches(instr_name, eid)

Teaches.instr_name \subseteq Instructor.name

Teaches.eid \subseteq Edition.eid

Employs(company_name, sid, jobtitle, start_date, end_date, skill, sklevel)

Employs.sid \subseteq Student.sid

Expertises_comp(company_name, expertise_area)