**Reduction to relational schema**

**Strong entities**

Company(comp\_id, street, city, state, zip\_code, primary\_sector, website)

Course(c\_code, title, level, description, status, retail\_price)

Job(job\_code, type, pay\_rate, pay\_type, company)

Job\_Profile(pos\_code, title, description, avg\_pay)

Knowledge\_Skill(ks\_code, title, description, level)

Person(per\_id, name, street, city, state, zip\_code, email, gender)

**Weak entity**

Section(c\_code, sec\_no, year)

**Multi-value entities**

Person\_phone(per\_id, phone\_number)

Job\_profile\_require\_skills(pos\_code, required\_skill)

Company\_specialty(comp\_id, specialty)

**Relationships**

Offers(comp\_id, c\_code, sec\_no, year)

Sec\_course(c\_code, sec\_no, year)

Teaches(c\_code, ks\_code)

Takes(per\_id, c\_code, sec\_no, year)

Skills(pos\_code, ks\_code)

Lists(job\_code, pos\_code)

Provides(comp\_id, job\_code)

Has(job\_code, per\_id)

Experience(per\_id, ks\_code)