Design the Relational Model corresponding to University ER Model

(page 262, Fig. 8.9)
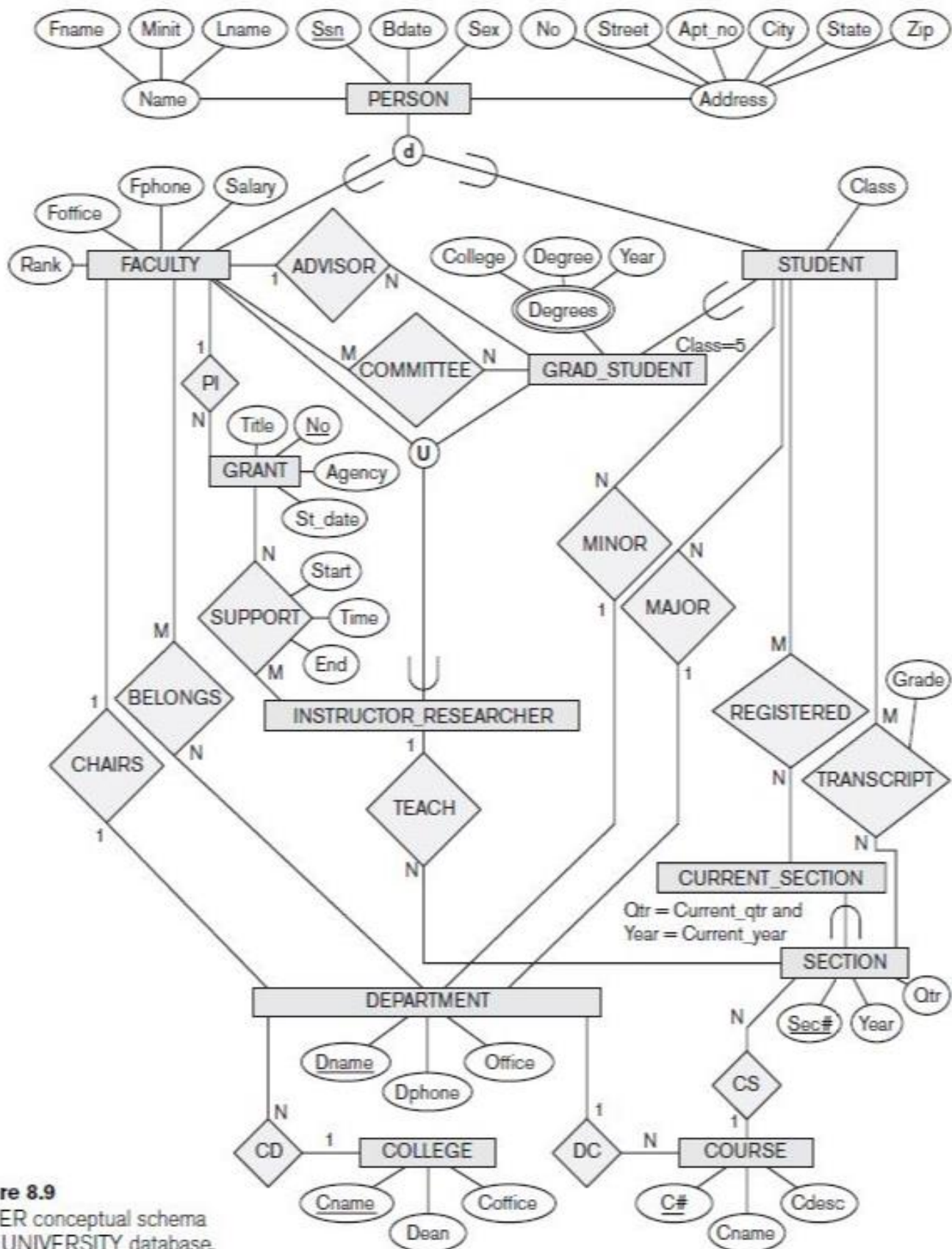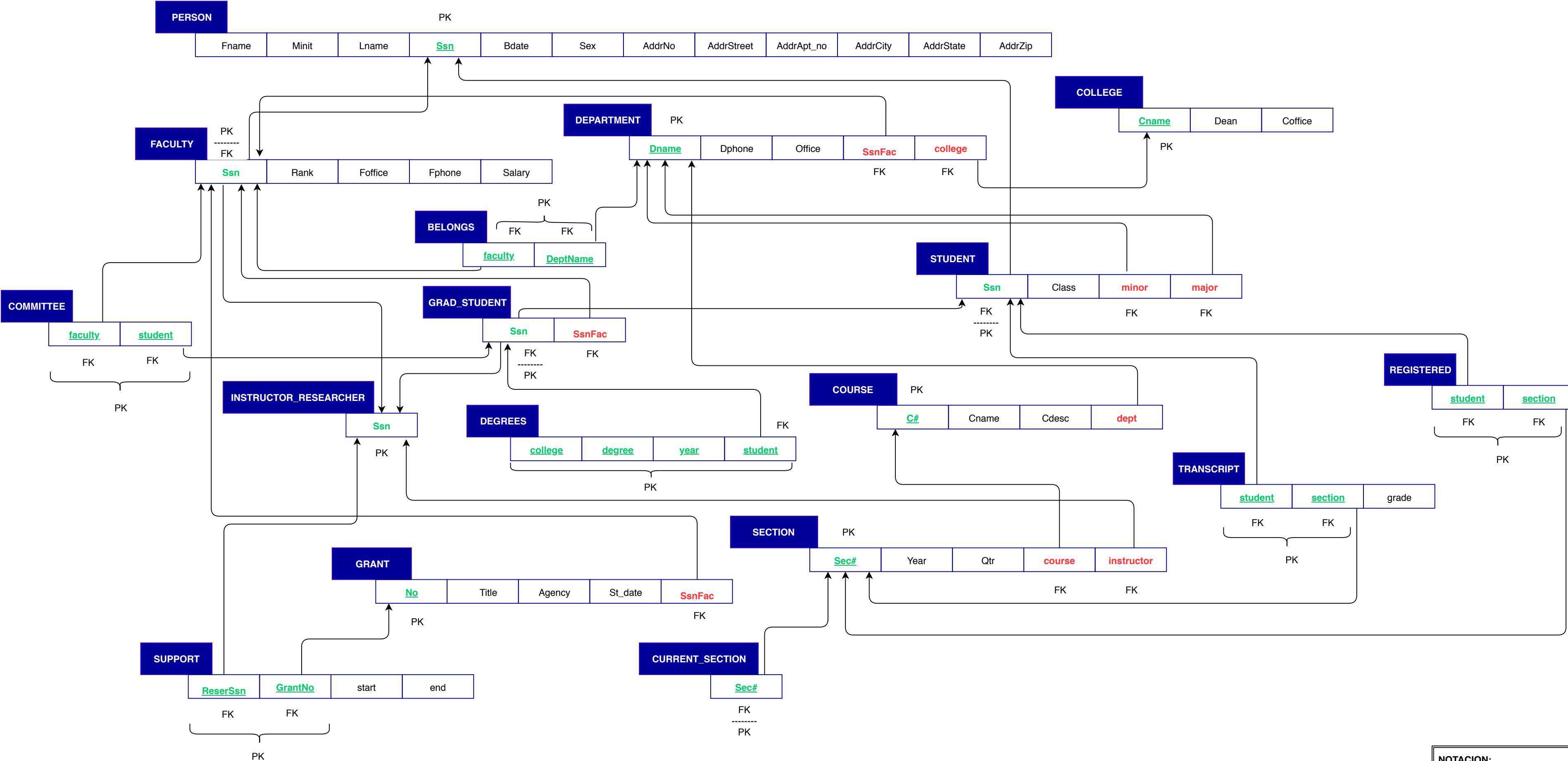
Figure 8.9
EER conceptual schema a UNIVERSITY database.

PERSON PK
| Fname | Minit | Lname | Ssn | Bdate | Sex | AddrNo | AddrStreet | AddrApt_no | AddrCity | AddrState | AddrZip |

COLLEGE
| Cname | Dean | Coffice |
PK

DEPARTMENT PK
| Dname | Dphone | Office | SsnFac | college |
FK FK

FACULTY PK / FK
| Ssn | Rank | Foffice | Fphone | Salary |

BELONGS PK
FK FK
| faculty | DeptName |

STUDENT
| Ssn | Class | minor | major |
FK / PK   FK   FK

COMMITTEE
| faculty | student |
FK FK
PK

GRAD_STUDENT
| Ssn | SsnFac |
FK / PK   FK

INSTRUCTOR_RESEARCHER
| Ssn |
PK

DEGREES
| college | degree | year | student |
PK
FK

REGISTERED
| student | section |
FK FK
PK

COURSE PK
| C# | Cname | Cdesc | dept |

TRANSCRIPT
| student | section | grade |
FK FK
PK

GRANT
| No | Title | Agency | St_date | SsnFac |
PK   FK

SECTION PK
| Sec# | Year | Qtr | course | instructor |
FK FK

SUPPORT
| ReserSsn | GrantNo | start | end |
FK FK
PK

CURRENT_SECTION
| Sec# |
FK / PK

NOTACION:
PRIMARY KEY
FOREIGN KEY

Design Development

FACULTY
Ssn point to Ssn (PERSON)

STUDENT
Ssn   point to Ssn (PERSON)
minor point to Dname (DEPARTMENT)
major point to Dname (DEPARTMENT)

GRAD STUDENT
Ssn   point to Ssn (STUDENT)
Ssn   point to Ssn (INSTRUCTOR_RESEARCHER)
advisor point to Ssn (FACULTY)

FACULTY
Ssn   point to Ssn (INSTRUCTOR_RESEARCHER)

DEGREES
student point to Ssn (GRAD_STUDENT)

GRANT
PI point to Ssn (FACULTY)

DEPARTMENT
chair   point to Ssn   (FACULTY)
college point to Cname (COLLEGE)

COURSE
dept point to Dname (DEPARTMENT)

SECTION
course   point to C# (COURSE)
instructor point to Ssn (INSTRUCTOR_RESEARCHER)

CURRENT_SECTION
Sec# point to Sec# (SECTION)

BELONGS
faculty point to Ssn (FACULTY)
dept   point to Dname (DEPARTMENT)

SUPPORT
grant   point to No (GRANT)
person point to Ssn (INSTRUCTOR_RESEARCHER)

REGISTERED
student   point to Ssn (STUDENT)

TRANSCRIPT
section   point to sec# (SECTION)

COMITTEE
faculty   point to Ssn (FACULTY)
student   point to ssn (GRAD_STUDENT)

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(2019-2021)