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CSC 423
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Project Part 1

Assumptions
A major does not need to be declared by a student to be offered by a department
Every department has a chair
Departments must have one or more faculty
Faculty must work for only one department
Events must have at least one hosting department
Events hosted by multiple departments share the same eventID, with different deptIDs

A. Entity types
   a. Department
   b. Student
   c. Major
   d. Event
   e. Faculty

B. Relationship types
   a. Department offers Major
   b. Major references Department
   c. Department employs Faculty
   d. Faculty works for Department
   e. Student declares Major
   f. Major has Student
   g. Department hosts Event
   h. Event hosted by Department
   i. Student attends Event
   j. Event comprises Student

C. Multiplicity Constraints
   a. 1..*
   b. 1..1
   c. 1..*
   d. 1..1
   e. 1..*
   f. 0..*
   g. 0..*
   h. 1..*
   i. 1..*
   j. 1..*

D. Attributes
  a. Department
     i. deptID
     ii. deptName
     iii. chairName

  b. Student
     i. sID
     ii. sInit
     iii. sName

  c. Major
     i. majorID
     ii. majorName

  d. Event
     i. eventID
     ii. eventName

  e. Faculty
     i. facultyID

  f. Department hosts Event
     i. sDate
     ii. fDate

  g. Department employs Faculty
     i. numFaculty

E. Candidate and primary key attributes (strong entity type only)
  a. Department
     i. deptID {PK}
  b. Major
     i. majorID {PK}
  c. Student
     i. sID {PK}
  d. Faculty
     i. facultyID {PK}
  e. Event
     i. eventID {PK}

F. E-R diagram

Faculty

PK	facultyID

1..* ◀ Employs ── numFaculty

1

Event

PK	eventID
	eventName

◀ Hosts   0..*   1..*

sDate
fDate

Department

PK	deptID
	deptName
	chairName

1

Offers

1..*

1..*

▲ Attends

1..*

Student

PK	sID
	sINIT
	sName

Declares ▶   0..*   1..*

Major

PK	majorID
	majorName