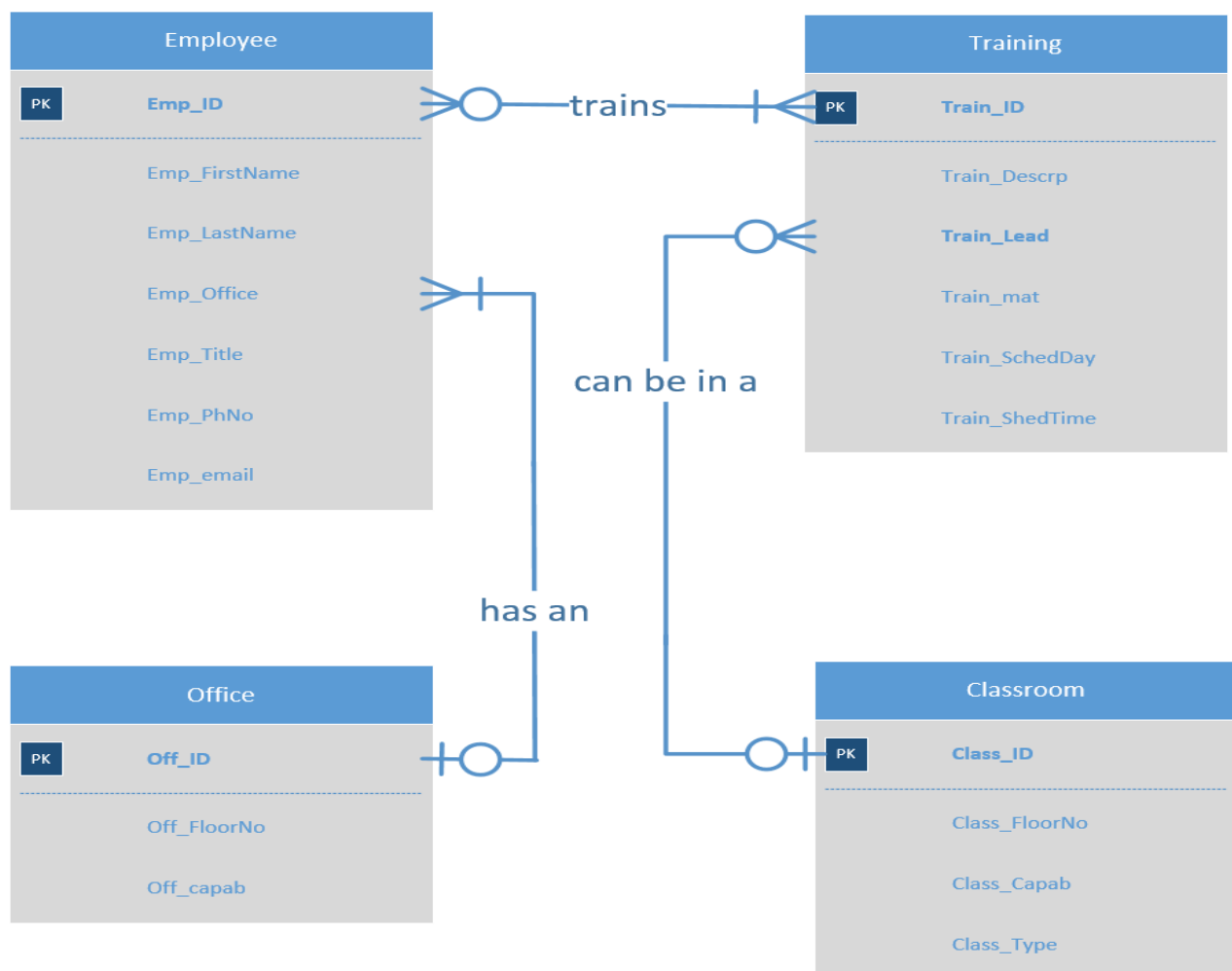## IST 659: Lab-1

1. For this lab, you are hired by the iSchool to develop a database management system that will allow them to be able to organize and manage their current employee, training, offices and classrooms. You need to use MS Visio to create an ERD that models this database.

➢ Necessary Assumptions (Business Rules):
- Each employee has at most one office but an office must at least have an employee
- Each employee trains at least one training but multiple training can be tutored by multiple employee
- Each training is located in at most one classroom but every classroom can have multiple training

2. SU Newhouse would like to build a new database system to keep information on companies' campus hiring and students' job applications on career fair events. In one career fair event, one company must have at least 5 job position available. One career fair event will have at least 15 companies. Students may apply for multiple positions, and may receive multiple interviews from different companies for different position. One interview can only be scheduled to one student, and it can be a part-time or full-time position.

➢ Necessary Assumptions (Business Rules):
- One career fair event will have at least 15 companies but multiple companies will be a part of one career fair event
- One company must have at least 5 job positions available but multiple available job positions will be from one company
- Students may apply for multiple positions from different companies and multiple positions from various companies are open to multiple students
- One job position will have multiple interviews but all interviews will be for one job position
- Students may receive multiple interviews from different companies but multiple interviews from different companies may be received by multiple students