A college requires an application to keep track of its **students** and **employees**. For each employee, the following information has to be recorded: *name*, *address* (street, city, postcode and state), *phone number*, *email address*, *salary*, *date hired* and *department*. The employees of the college may be categorized as either *faculty* or *administrative staff*.

A **faculty member** has a *title* (e.g. Dr., Associate Professor, Mr. etc) and *office* (building, room number and telephone extension).

An **administrative** staff has a *telephone extension*.

For a **student**, the *name*, *address* (street, city, postcode and state), *phone number*, *email address* and *year of study* (freshman, sophomore, junior, or senior) has to be stored.

**Question:**

Design the classes required for this application by drawing the UML class diagram (you may leave out the operations for each class). Remember to implement the concepts of composition / aggregation and inheritance in your design of classes.

