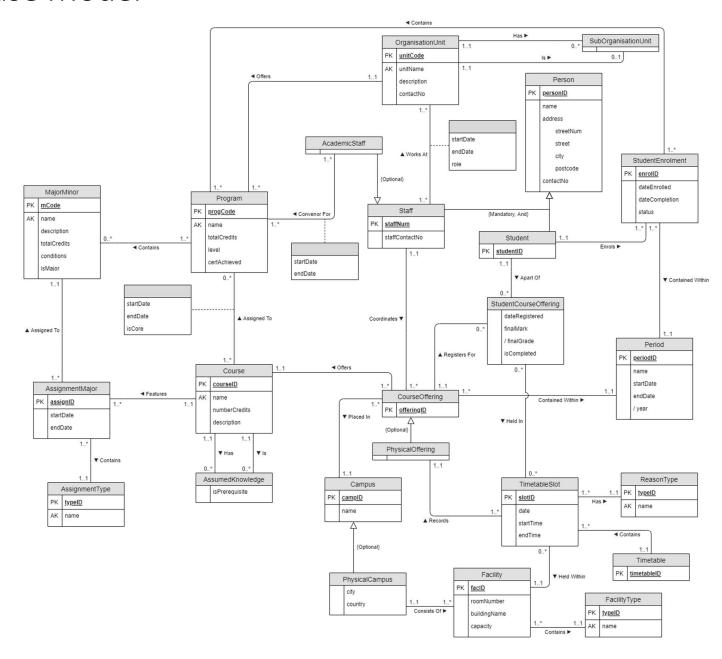
## **EER Database Model**



## Relational Schema

**OrganisationUnit**(unitCode, unitName, description, contactNo)

Primary Key unitCode

Alternative Key unitName

SubOrgisationUnit(oUnit, subOUnit)

Primary Key oUnit, subOUnit

Foreign Key oUnit References OrganisationUnit(unitCode) ON UPDATE NO ACTION ON DELETE NO ACTION Foreign Key subOUnit References OrganisationUnit(unitCode) ON UPDATE NO ACTION ON DELETE NO ACTION

AssignmentType(typeID, name)

Primary Key typeID

Alternative Key name

MajorMinor(mCode, name, description, totalCredits, conditions, isMajor)

Primary Key mCode

Alternative Key name

**Course**(courseID, name, numberCredits, description)

Primary Key courseID

Alternative Key name

**AssumedKnowledge**(course, assumedCourse, isPrerequisite)

Primary Key course, assumedCourse

Foreign Key course References Course(courseID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key assumedCourse References Course(courseID) ON UPDATE NO ACTION ON DELETE NO ACTION

Program(progCode, name, oUnit, totalCredits, level, certAchieved)

Primary Key progCode

Alternative Key name

Foreign Key oUnit References OrganisationUnit(unitCode) ON UPDATE NO ACTION ON DELETE NO ACTION

ProgramCourse(program, course, startDate, endDate, isCore)

Primary Key program, course, startDate

Foreign Key program References Program(progCode) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key course References Course(courseID) ON UPDATE NO ACTION ON DELETE NO ACTION

Person(personID, name, isStaff, isStudent, streetNum, street, city, postcode, contactNo, staffContact)

Primary Key personID

Alternative Key personID, isStaff

Alternative Key personID, isStudent

AcademicStaff(staff, isStaff)

Primary Key staff

Foreign Key staff, isStaff References Person(personID, isStaff) ON UPDATE CASCADE ON DELETE NO ACTION

**OrganisationStaff**(oUnit, staff, isStaff, startDate, endDate, role)

Primary Key oUnit, staff, startDate

Foreign Key oUnit References OrganisationUnit(unitCode) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key staff, isStaff References Person(personID, isStaff) ON UPDATE CASCADE ON DELETE NO ACTION

ProgramStaff(program, convenor, startDate, endDate)

Primary Key program, convenor, startDate

Foreign Key program References Program(progCode) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key convenor References AcademicStaff(staff) ON UPDATE CASCADE ON DELETE NO ACTION

ProgramMajorMinor(program, majorMinor)

**Primary Key** program, majorMinor

Foreign Key program References Program(progCode) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key majorMinor References MajorMinor(mCode) ON UPDATE CASCADE ON DELETE NO ACTION

**AssignmentMajor**(assignID, majorMinor, course, type, startDate, endDate)

Primary Key assignID

Foreign Key majorMinor References MajorMinor(mCode) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key course References Course(courseID) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key type References AssignmentType(typeID) ON UPDATE CASCADE ON DELETE NO ACTION

Campus(campID, name)

Primary Key campID

PhysicalCampus(campID, city, country)

**Primary Key** campID

Foreign Key campID References Campus(campID) ON UPDATE NO ACTION ON DELETE NO ACTION

FacilityType(typeID, name)

Primary Key typeID

Alternative Key name

**Facility**(facID, campus, roomNumber, buildingName, capacity, type)

Primary Key facID

Alternative Key campus, rooNumber, buildingName

Foreign Key campus References PhysicalCampus(campID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key type References FacilityType(typeID) ON UPDATE NO ACTION ON DELETE NO ACTION

Period(periodID, name, startDate, endDate, year)

**Primary Key** periodID

**Derived** year (startDate)

CourseOffering(offeringID, course, coordinator, isStaff, campus, period)

**Primary Key** offeringID

Foreign Key course References Course(courseID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key coordinator, isStaff References Person(personID, isStaff) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key campus References Campus (campID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key period References Period(periodID) ON UPDATE NO ACTION ON DELETE NO ACTION

StudentCourseOffering(student, isStudent, offering, dateRegistered, finalMark, finalGrade, isCompleted)

Primary Key student, offering

Foreign Key student, isStudent References Person(personID, isStudent) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key offering References CourseOffering(offeringID) ON UPDATE CASCADE ON DELETE NO ACTION

**Derived** finalGrade (finalMark)

**PhysicalOffering**(offeringID)

Primary Key offeringID

Foreign Key offeringID References CourseOffering(offeringID) ON UPDATE CASCADE ON DELETE NO ACTION

ReasonType(typeID, name)

Primary Key typeID

Alternative Key name

TimetableSlot(slotID, facility, offering, staff, isStaff, date, startTime, endTime, reason)

Primary Key slotID

Alternative Key slotID, offering

Foreign Key facility References Facility(facID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key offering References PhysicalOffering(offeringID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key reason References ReasonType(typeID) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key staff, isStaff References Person(personID, isStaff) ON UPDATE NO ACTION ON DELETE NO ACTION

**StudentTimetableSlot**(student, offering, slot)

Primary Key student, slot, offering

Foreign Key student, offering References StudentCourseOffering(student, offering) ON UPDATE NO ACTION ON DELETE NO ACTION

Foreign Key slot, offering References TimetableSlot(slotID, offering) ON UPDATE NO ACTION ON DELETE NO ACTION

**StudentEnrolment**(enrolID, student, isStudent, period, dateEnrolled, dateCompletion, status)

Primary Key enrolID

Foreign Key student, isStudent References Person(personID, isStudent) ON UPDATE CASCADE ON DELETE NO ACTION Foreign Key period References Period(periodID) ON UPDATE CASCADE ON DELETE NO ACTION

ProgramEnrolment(enrolID, program)

Primary Key enrolID, program

Foreign Key enrolID References StudentEnrolment(enrolID) ON UPDATE CASCADE ON DELETE NO ACTION

Foreign Key program References Program(progCode) ON UPDATE CASCADE ON DELETE NO ACTION