DAMG-7370

Assignment: Graduate Student Model

Business Questions

Submitted By: Team 7

Umair Ul Hasan Mohammed - 001091762

Abhishek Sahebrao Palkar - 001517206

Ameya Adwait Ranade – 001561048

What are the core requirements and elective courses for these programs

Query:

Create View coreRequirements as

Select dep.departmentName, dep.programName, dc.courseName, dc.courseNumber, dc.lectureMode, dc.numberOfCredits, dc.isCore

From dimDepartments dep

Join dimCourse dc

on dep.departmentSk = dc.departmentSK

Where dc.isCore = 'Yes';

Graphical user interface, application

Description automatically generated

Select dep.departmentName, dep.programName, dc.courseName, dc.courseNumber, dc.lectureMode, dc.numberOfCredits, dc.isCore

From dimDepartments dep

Join dimCourse dc

on dep.departmentSk = dc.departmentSK

Where dc.isCore = 'No';

Graphical user interface, text

Description automatically generated

What classes (course & section) did students complete in a semester & what were their grades

Query:

Select fse.studentNUID, ds.firstName, ds.lastName, dsem.semesterName, dc.courseName, dc.courseNumber, fse.grades, fse.dropDate

From factStudentEnrollment fse

Join dimStudents ds

On fse.StudentNUID = ds.studentNUID

Join dimCourseOffering dco

On fse.CRN = dco.CRN

Join dimCourse dc

On dco.courseNumber = dc.courseNumber

Join dimSemester dsem

On dco.semesterSK = dsem.semesterSK;

Graphical user interface, text, application

Description automatically generated

What were the enrollment and drop dates if applicable for students in each class in a semester

Query:

Select ds.firstName, ds.lastName, ds.studentNUID, dc.courseName, dc.courseNumber ,dcal.date as "EnrollmentDate", fse.dropDate as "DropDate"

From factStudentEnrollment fse

Join dimCalendar dcal

On fse.calendarSK = dcal.calendarSK

Join dimStudents ds

On fse.studentNUID = ds.studentNUID

Join dimCourseOffering dco

On fse.CRN = dco.CRN

Join dimCourse dc

On dco.courseNumber = dc.courseNumber;

Graphical user interface, application

Description automatically generated

Who were the teachers in each class above

Query:

Select t.CRN, dp.professorNUID, dp.firstName, dp.lastName, t.semesterName, t.courseNumber, t.courseName

From (Select dco.professorNUID, dsem.semesterName, dc.courseNumber, dc.courseName, dco.CRN

From factStudentEnrollment fse

Join dimCalendar dcal

On fse.calendarSK = dcal.calendarSK

Join dimStudents ds

On fse.studentNUID = ds.studentNUID

Join dimCourseOffering dco

On fse.CRN = dco.CRN

Join dimCourse dc

On dco.courseNumber = dc.courseNumber

Join dimSemester dsem

On dco.semesterSK = dsem.semesterSK)

as t

Join dimProfessors dp

On t.professorNUID = dp.professorNUID;

Graphical user interface, text

Description automatically generated

What were the classes taught each semester

Query:

Select dco.CRN, dc.courseNumber, dc.courseName, dsem.semesterName

From dimCourseOffering dco

Join dimCourse dc

On dco.courseNumber = dc.courseNumber

Join dimSemester dsem

On dco.semesterSK = dsem.semesterSK

Where dco.currentlyAvailable = 'Yes';

A screenshot of a computer

Description automatically generated with medium confidence

What teachers taught classes in a degree program in a semester

Query:

Select dp.professorNUID, dp.firstName, dp.lastName, dep.programName, dc.courseNumber, dc.CourseName

From dimCourseOffering dco

Join dimProfessors dp

On dco.professorNUID = dp.professorNUID

Join dimDepartments dep

On dep.departmentSK = dco.departmentSK

Join dimCourse dc

On dco.courseNumber = dc.courseNumber

Where dco.currentlyAvailable = 'Yes'

Graphical user interface, text, application, email

Description automatically generated

Who are the students enrolled in a degree program and attributes such as ID, email, date of birth (DOB), hometown, campus/off-campus address if applicable, etc.

Query:

Select dep.departmentName, dep.programName, ds.studentNUID, ds.firstName, ds.lastName, ds.email,

ds.dateOfBirth, dho.city as "HomeTown", dho.state as "HomeState", dho.country as "HomeCountry",

dg.homeAddress, dg.city, dg.state, dg.country, dg.zipcode

From factStudentEnrollment fse

Join dimStudents ds

On fse.studentNUID = ds.studentNUID

Join dimStudentHometownOutrigger dho

On ds.hometownStudentSK = dho.hometownStudentSK

Join dimDepartments dep

On fse.departmentSK = dep.departmentSK

Join dimGeographys dg

On ds.geagraphySK = dg.geagraphySK

Graphical user interface, text, application

Description automatically generated