

For 1NF I removed some properties that repeated the same data, like the enrollmentDate, as it was the same as the termStart.

I removed the Term table and I put termStart and termEnd in the CourseOffering table.

I also removed some IDs like the programCourseID, as a composite key could be made using the courseID and programID as partial keys instead.

For 2NF I didn't need to make any changes.

For 3NF I didn't need to make any changes.

[Google Sheet link](#)

Messy version of the table copied from the google sheet

	tags like	—»removed—»	are to			
	that the property to the left was altered while moving to the right					
0NF		1NF		2NF		3NF
Student		Student		Student		Student
studentID(PK)		studentID(PK)		studentID(PK)		studentID(PK)
programID(FK)		programID(FK)		programID(FK)		programID(FK)
studentNumber	—»removed —»	firstName		firstName		firstName
firstName		lastName		lastName		lastName
lastName		emailAddress		emailAddress		emailAddress
emailAddress		dateOfBirth		dateOfBirth		dateOfBirth
dateOfBirth		dateEnrolled		dateEnrolled		dateEnrolled
dateEnrolled						
status	—»removed —»	Program		Program		Program
		programID(PK)		programID(PK)		programID(PK)
Program		programName		programName		programName
programID(PK)		credentialType		credentialType		credentialType

programCode	—»removed —»	durationInTerms		durationInTerms		durationInTerms
programName		isAvailable		isAvailable		isAvailable
credentialType						
durationInTerms		ProgramCourse		ProgramCourse		ProgramCourse
isAvailable		programID(FK)(PK)		programID(FK)(PK)		programID(FK)(PK)
		courseID(FK)(PK)		courseID(FK)(PK)		courseID(FK)(PK)
ProgramCourse		isRequired		isRequired		isRequired
programCourseID(PK)	—»removed —»					
programID(FK)		Course		Course		Course
courseID(FK)		courseID(PK)		courseID(PK)		courseID(PK)
isRequired		courseTitle		courseTitle		courseTitle
recommendedTermNumber	—»removed —»	courseDescription		courseDescription		courseDescription
		creditHours		creditHours		creditHours
Course						
courseID(PK)		CourseOffering		CourseOffering		CourseOffering
courseCode	—»removed —»	offeringID(PK)		offeringID(PK)		offeringID(PK)
courseTitle		courseID(FK)		courseID(FK)		courseID(FK)
courseDescription		instructorID(FK)		instructorID(FK)		instructorID(FK)
creditHours		termStart		termStart		termStart
		termEnd		termEnd		termEnd
CourseOffering		academicYear		academicYear		academicYear
offeringID(PK)		scheduleInfo		scheduleInfo		scheduleInfo
courseID(FK)		selectionCode		selectionCode		selectionCode
termID(FK)		deliveryMode		deliveryMode		deliveryMode
scheduleInfo		maxCapacity		maxCapacity		maxCapacity
selectionCode		roomLocation		roomLocation		roomLocation
deliveryMode						

maxCapacity		CourseEnrollment		CourseEnrollment		CourseEnrollment
roomLocation		studentID(FK)(PK)		studentID(FK)(PK)		studentID(FK)(PK)
		offeringID(FK)(PK)		offeringID(FK)(PK)		offeringID(FK)(PK)
Term	—»removed —»	enrollmentStatus		enrollmentStatus		enrollmentStatus
termID(PK)	—»removed —»	finalGrade		finalGrade		finalGrade
termName	—»removed —»					
startDate	—»moved— »	InstructorAssignment		InstructorAssignment		InstructorAssignment
endDate	—»moved— »	instructorID(FK)(PK)		instructorID(FK)(PK)		instructorID(FK)(PK)
academicYear	—»moved— »	offeringID(FK)(PK)		offeringID(FK)(PK)		offeringID(FK)(PK)
CourseEnrollment		Instructor		Instructor		Instructor
enrollmentID(PK)	—»removed —»	InstructorID(PK)		InstructorID(PK)		InstructorID(PK)
studentID(FK)		firstName		firstName		firstName
offeringID(FK)		lastName		lastName		lastName
enrollmentStatus		emailAddress		emailAddress		emailAddress
finalGrade		hireDate		hireDate		hireDate
enrollmentDate	—»removed —»	officeLocation		officeLocation		officeLocation
InstructorAssignment						
assignmentID(PK)	—»removed —»					
instructorID(FK)						
offeringID(FK)						
role	—»removed —»					
Instructor						

InstructorID(PK)						
firstName						
lastName						
emailAddress						
hireDate						
officeLocation						