Student Id	Student Name	Address	Email	Major
S1	Joe Green	124 Main st	Joe@school.edu	M1
S2	Sue Smith	345 Second St	Sue@school.edu	M1
S3	Nick Green	45 York Rd	Nick@school.edu	M2
S4	Andy Andrews	600 5th Ave	Andy@school.edu	M2
S5	Andrew Andys	123 Main st	Andrew@school.edu	M1
S6	Smith Sue	345 Second St	Smith@school.edu	M1
S7	Green Joe	45 York Rd	Green@school.edu	M1

Student Table

Class Id	Class Name
C1	IT1025
C2	IT1050
C3	IT2351
C4	MATH1200
C5	MATH1234
C6	MATH5678
C7	MATH8910

Class Table

Student Id	Class Id
S1	C2
S1	C4
S2	C5
S3	C2
S4	C2
S4	C1

Student Schedule Table

Major Id	
M1	Programming
M2	Networking
M3	Math

Major Table

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primary/foreign(keys)

Table	Primary Key(s)	Foreign Key(s)
student	student_id	major
classes	class_id	
student_schedules	student_id, class_id	student_id, class_id
majors	major_id	

Explanation:

First Normal form was achieved by only including atomic values for each row, multiple values were removed and added as additional rows. Second Normal form was avoided as separate tables that housed attributes pertaining to classes and student schedules were created, leaving no partial dependencies to the primary key. If a table for students schedules that contained the columns student_id, class and class_name was created with student_id and class_id as a composite key, a partial dependency would created with class_name depending on the class. Third normal form was achieved by removing transitive dependencies, this meant creating a new table to house attributes pertaining to all classes offered because this attribute was dependent on a non prime key as well as the ‘major’ attribute.