

This is the solution of the schema without the abroad bachelor project and cluster parts As we will not be using them in the user stories.

User (user\_id, Username, Password, Email, Role, phone\_number)

Lecturer (Lecturer\_id, Schedule)

Lecturer.Lecturer\_id references User.user\_id

LecturerFields(Lecturer\_id, field)

LecturerFields.Lecturer\_id references Lecturer.user\_id

Company(Company\_id, Name, Representative\_name, Representative\_Email, Location)

Company.Company\_id references User.user\_id

Employee (Staff\_id, Company\_id, Username, Password, Email, Field, Phone)

Employee.Company\_id references Company.Company\_id

External\_Examiner(EE\_id, Schedule)

External\_Examiner.EE\_id references User.user\_id

Teaching\_Assistant(TA\_id, Schedule)

Teaching\_Assistant.TA\_id references User.user\_id

Coordinator(coordinator\_id)

Coordinator.coordinator\_id references User.user\_id

Student(sid, first\_name, last\_name, Major\_code, Date\_Of\_Birth, Adress, Age, Semester,

GPA, TotalBachelorGrade, CumulativeProgressReportGrade)

Student.sid references User.user\_id

Student.Major\_code references Major.Major\_Code

Where : Student.Age = current date – Student.Date\_Of\_Birth,

CPG = calculated(Average ProgressReprt.grade),

TotalBachelorGrade = calculated(0.3\*Thesis.Total\_grade+0.3\*Defense.Total\_grade+0.4\*CumulativeProgressReportGrade)

Bachelor\_Project(Code, Name, Submitted\_Materials, Description)

BachelorSubmittedMaterials (Code, Material)

BachelorSubmittedMaterials.Code references Bachelor\_Project.Code

Academic(Academic\_code, L\_id, TA\_id, EE\_id)

Academic.Academic\_code references Bachelor\_Project.Code

Academic.L\_id references Lecturer.Lecturer\_id

Academic.TA\_id references Teaching\_Assistant.TA\_id

Academic.EE\_id references External\_Examiner.EE\_id

Industrial(Industrial\_code, C\_id, L\_id, E\_id)

Industrial. Industrial\_code references Bachelor\_Project.Code

Industrial.C\_id references Company.Company\_id

Industrial.L\_id references Lecturer.Lecturer\_id

Industrial.E\_id references Employee.Staff\_id

Faculty(Faculty\_Code, Name, Dean)

Faculty.Dean references Lecturer.Lecturer\_id

Major (Major\_Code, Faculty\_code, Major\_Name)

Major.Faculty\_code references Faculty.Faculty\_Code

Meeting (Meeting\_ID, L\_id, STime, ETime, Duration, Date, Meeting\_Point)

Meeting.L\_id references Lecturer.Lecturer\_id

Where : Meeting.Duration = Meeting.ETime – Meeting.STime

MeetingToDoList(Meeting\_ID, ToDoList)

MeetingToDoList.Meeting\_ID references Meeting.Meeting\_ID

MeetingAttendents(Meeting\_ID, Attendant\_id)

MeetingAttendents.MeetingID references Meeting.Meeting\_ID

MeetingAttendents.Attendant\_id references User.user\_id

Thesis(sid, Title, Deadline, PDF\_doc, Total\_grade)

Thesis.sid references Student.sid

Where : Thesis.Total\_Grade =

Calculated(((GradeAcademicThesis.EE\_grade+GradeAcademicThesis.Lecturer\_grade)/2 or  
(GradeIndustrialThesis.Company\_grade & GradeIndustrialThesis.Employee\_grade)/2)

Defense(sid, Location, Content, Time, Date, Total\_Grade)

Defense.sid references Student.sid

Where : Defense.Total\_Grade = Calculated((GradeAcademicDefense.EE\_grade + GradeAcademicDefense.Lecturer\_grade)/2 or (GradeIndustrialDefense.Compay\_grade+GradeIndustrialDefense.Employee\_grade)/2)

ProgressReport(sid, Date, Content, Grade, UpdatingUser\_id)

ProgressReport.sid references Student.sid

ProgressReport.UpdatingUser\_id references User.user\_id

Where : ProgressReport.Grade = Calculated((GradeAcademicPR.LecGrade) or (GradeIndustrialPR.Company\_grade+GradeAcademicPR.Lecturer\_grade)/2)

GradeIndustrialPR(L\_id, C\_id, sid, Date, Company\_grade, Lecturer\_grade)

GradeIndustrialPR.L\_id references Lecturer.Lecturer\_id

GradeIndustrialPR.C\_id references Company.Company\_id

GradeIndustrialPR.sid references ProgressReport.sid

GradeIndustrialPR.Date references ProgressReport.Date

GradeAcademicPR(L\_id, sid, Date, Lecturer\_grade)

GradeAcademicPR.L\_id references Lecturer.Lecturer\_id

GradeAcademicPR.sid references ProgressReport.sid

GradeAcademicPR.Date references ProgressReport.Date

GradeAcademicThesis(L\_id, EE\_id, sid, Title, EE\_grade, Lecturer\_grade)

GradeAcademicThesis.L\_id references Lecturer.Lecturer\_id

GradeAcademicThesis.EE\_id references External\_Examiner.EE\_id

GradeAcademicThesis.sid references Thesis.sid

GradeAcademicThesis.~~Title~~ references Thesis.Date

GradeIndustrialThesis(C\_id, E\_id, sid, Title, Company\_grade, Employee\_grade)

GradeIndustrialThesis.C\_id references Company.Company\_id

GradeIndustrialThesis.E\_id references Employee.Staff\_id

GradeIndustrialThesis.sid references Thesis.sid

GradeIndustrialThesis.Title references Thesis.Date

GradeAcademicDefense(L\_id, EE\_id, sid, Location, EE\_grade, Lecturer\_grade)

GradeAcademicDefense.L\_id references Lecturer.Lecturer\_id

GradeAcademicDefense.EE\_id references External\_Examiner.EE\_id

GradeAcademicDefense.sid references Defense.sid

GradeAcademicDefense.Location references Defense.Location

GradeIndustrialDefense(C\_id, E\_id, sid, Location, Company\_grade, Employee\_grade)

GradeIndustrialDefense.C\_id references Company.Company\_id

GradeIndustrialDefense.E\_id references Employee.Staff\_id

GradeIndustrialDefense.sid references Defense.sid

GradeIndustrialDefense.Location references Defense.Location

LecturerRecommendEE(L\_id, EE\_id, PCode)

LecturerRecommendEE.L\_id references Lecturer.Lecturer\_id

LecturerRecommendEE.EE\_id references External\_Examiner.EE\_id

LecturerRecommendEE.PCode references Academic.Academic\_code

StudentPreferences(sid, PCode, PreferenceNumber)

StudentPreferences.sid REFERENCES Student.sid

StudentPreferences.PCode REFERENCES Bachelor\_Project.Code

MajorHasBachelorProject(Major\_code, Project\_code)

MajorHasBachelorProject.Major\_code REFERENCES Major.Major\_code

MajorHasBachelorProject.Project\_code REFERENCES Bachelor\_Project.Code