

GIU Bachelor Portal

User (ID: int, Username: string, Password: string, Role: string)

UserPhone (user: int, phone_number)

UserPhone.user references User

UserEmail (user: int, email: string)

UserEmail.user references User

Student (ID: int, first_name: string, last_name: string,
birth_date: date, TA_assigned: int, semester: int, address:
string, address: string, GPA: real, thesis_grade: int,
defense_grade: int, cumulative_progress_grade: decimal,
major_code: int, grade: int, total_bachelor_grade: int,
submitted: bit, supervising_doc: int, p_id: int)

Student.p_id references Bachelor_Project

Student.id references User.id

Student.supervising_doc references Lecturer

Student.TA_assigned references Teacher_assistant

Student.thesis_grade references Thesis

Student.defense_grade references Defense

Student.major_code references major

Student.grade references Progress_report.grade

Where: Student.cumulative_progress_grade calculated from:
Student.thesis_grade, Student.defense_grade, Student.grade

Where: Student.total_bachelor_grade calculated from:
Student.thesis_grade, Student.defense_grade

Where: Student.GPA derived from calculated GPA

Student_phone (Student:int, phone_number:int)

StudentPhone.Student references Student

Makes_preference (preference num: int, b_id: int, sid: int)

Makes_preference.b_id references Bachelor_project.code

Makes_preference.sid references Student

Grade_ES (sid: int, ES_Grade)

Grade_ES. Sid references Student

Company (c_name: string, rep_email: string, location: string,
rep_name: string, id: int)

Company.Id references USER

Employee (staff_id: int, company_id: int, e_name: string, email:
string, field_of_work: string, registered: bit)

Employee.company_id references Company

Employee_number (staff_id: int, phone_number: int)

Employee_number. staff_id references Employee

Lecturer (staff_id: int, field_of_interest: string, schedule: string)

Lecturer.staff_id references User

Grades_thesis (T_grade: int, sid:int, title: string)

Grades_thesis.sid references Thesis

Grades_thesis. title references Thesis

Grades_PReport (pr_grade: int, sid: int, pr_id: int, doc_id:int)

Grades_PReport.sid references Progress_report

Grades_PReport.pr_id references Progress_report

Grades_PReport.doc_id references Lecturer

Grades_Defence (D_grade: int, sid:int, date: date)

Grades_Defense.sid references Defense

Grade_Defense.date references Date

Teacher_assistent (id: int, schedule: string, Coordinator.id: int)

Teacher_assistent.id references User

Teacher_assistant. Coordinator.id references Coordinator.

External_examiner (schedule: string, id: int, Coordinator.id: int)

External_examiner.id references User

External_examiner. Coordinator.id: int
references Coordinator

EE_grades_defense (EE_id: int, Date: date, sid: int, d_grade: int)

EE_grades_defense.EE_id references External_examiner

EE_grades_defense.Date references Defense

EE_grades_defense.sid references Defense

EE_grades_thesis (ee_id: int, title: string, sid: int, t_grade: int)

EE_grades_thesis.ee_id references External Examiner

EE_grades_thesis.title references thesis

EE_grades_thesis.sid references thesis

Coordinator (id: int)

Coordinator.id references User

External_supervisor (field_of_interest: string, country_of_res: string, office: string, id: int)

External_supervisor.id references User

Faculty (faculty_code : int, fac_name: string, dean: string)

Major (major_code: int, major_name: string, faculty_code: int)

Major.faculty_code references faculty

Cluster (id: int, field_name: string, description: string, doc_id: int)

Cluster.doc_id references Lecturer

Bachelor_projects (code: int, name: string, description: string, submitted_material: string, resources: string, CID: int, major_code: int)

Bachelor_projects.major_code references Major

Bachelor_projects.CID references Company

Recommends (doc_id: int, p_id: int, examiner_id: int)

Recommends.doc_id references Lecturer

Recommends.p_id references Local

Recommends.examiner_id references External Examiner

Evaluate (EE_id: int, doc_id: int, pid: int)

Evaluate.EE_id references External_Examiner

Evaluate.doc_id references Lecturer

Evaluate.pid references Bachelor_Projects

Local (type: string, ID: int, doc_id: int, emp_id: int, c_id: int)

Local.id references Bachelor_project

Local.doc_id references Lecturer

Local.emp_id references Employee

Local.c_id references Employee

Abroad (ID: int, country_name: string, name_of_institution:
string, External_supervisor_id:int)

Abroad.id references Bachelor_project

Abroad.External_supervisor_id references External_supervisor

Thesis (title: string, SID: int, deadline: date, pdf_doc: string, total_grade: decimal)

Thesis.sid references student

Where Thesis.total_grade calculated from:

EE_grades_thesis.t_grade, Grades_thesis. T_grade, C_grades.
T_grade, E_grades. T_grade

Defense (content: string, location: string, time: time, date: date, total_grade: decimal, SID: int)

Defense.sid references student

Where Defense.total_grade = EE_grades_defense. d_grade,
Grades_defense. D_grade, C_grades. D_grade, E_grades.
D_grade

Progress_report (id: int, sid:int, content: string, date: date, grade: decimal, TA_ID:int)

Progress_report.TA_ID references Teaching_Assistant

Progress_report.sid references student

Where Progress_report. grade calculated from:

Grades_PReport.pr_grade, Comp_grades.pr_grade,
Grades_PReport.pr_grade

Comp_grades (cid: int, pr_id: int, sid: int, pr_grade: int)

Comp_grades.cid references Company

Comp_grades.pr_id references Progress_Report

Comp_grades.sid references Progress_Report

Meeting (meeting_id: int, meeting_point: string, date: date,
start_time: time, end_time: time, sid: int, Doc_id: int)

Meeting.Doc_id references Lecturer

Meeting.sid references Student

meetingToDoList (meeting: int, to do list: String)

meetingToDoList.meeting references meeting

Where: meeting. Duration = meeting. End_Time – meeting.
Start_Time

Hardware (code: int, name: string, type: string, available: int,
needed: string, used: string,)

Hardware.ID references User

Hardware_add (code:int, sid:int)

Hardware_add. code references hardware

Hardware_add.sid references student

Hardware_see (code:int, sid:int)

Hardware_see. code references hardware

Hardware_see.sid references student

Hardware_modify (code:int, sid:int)

Hardware_modify. code references hardware

Hardware_modify.sid references student

E_grade (staff_id: int, cid: int, sid: int, date: date, D_grade: int)

E_grades (staff_id, cid) references Employee

E_grades (sid, date) references Defense

C_Grade (cid: int, sid: int, date: date, D_grade: int)

C_Grade.cid references Company

C_Grade (sid, date) references Defense

E_grades (cid: int, staff_id: int, sid: int, title: string, T_grade: int)

e_grades (cid, staff) references Employee

e_grades (sid, title) references Thesis

C_grades (cid: int, sid: int, title: string, T_grade: int)

e_grades.cid references Employee

e_grades (sid, title) references Thesis