

```
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD_FOREIGN_KEY_CHECKS=@@FOREIGN_KEY_CHECKS, FOREIGN_KEY_CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE, SQL_MODE='TRADITIONAL,ALLOW_INVALID_DATES';
```

```
-- Schema student_db
```

```
CREATE SCHEMA IF NOT EXISTS `student_db` DEFAULT CHARACTER SET utf8 ;
USE `student_db` ;
```

```
-- Table `student_db`.`students`
```

```
DROP TABLE IF EXISTS `student_db`.`students` ;
```

```
CREATE TABLE IF NOT EXISTS `student_db`.`students` (
  `student_id` INT NOT NULL AUTO_INCREMENT,
  `student_fname` VARCHAR(45) NOT NULL,
  `student_lname` VARCHAR(45) NOT NULL,
  `student_dob` DATE NOT NULL,
  `student_email` VARCHAR(45) NULL,
  `student_tel` VARCHAR(45) NULL,
  `student_address` VARCHAR(45) NULL,
  PRIMARY KEY (`student_id`))
ENGINE = InnoDB;
```

```
CREATE UNIQUE INDEX `student_id_UNIQUE` ON `student_db`.`students` (`student_id` ASC);
```

```
-- Table `student_db`.`courses`
```

```
-- -----  
DROP TABLE IF EXISTS `student_db`.`courses` ;
```

```
CREATE TABLE IF NOT EXISTS `student_db`.`courses` (  
  `course_code` INT NOT NULL,  
  `course_name` VARCHAR(45) NOT NULL,  
  `course_credits` VARCHAR(45) NULL,  
  `description` TEXT NULL,  
  PRIMARY KEY (`course_code`))  
ENGINE = InnoDB;
```

```
CREATE UNIQUE INDEX `course_code_UNIQUE` ON `student_db`.`courses` (`course_code` ASC);
```

```
-- -----  
-- Table `student_db`.`professors`  
-- -----
```

```
DROP TABLE IF EXISTS `student_db`.`professors` ;
```

```
CREATE TABLE IF NOT EXISTS `student_db`.`professors` (  
  `professor_id` INT NOT NULL AUTO_INCREMENT,  
  `professor_name` VARCHAR(45) NOT NULL,  
  `professor_qualification` VARCHAR(45) NULL,  
  PRIMARY KEY (`professor_id`))  
ENGINE = InnoDB;
```

```
CREATE UNIQUE INDEX `professor_id_UNIQUE` ON `student_db`.`professors` (`professor_id` ASC);
```

```
-- -----  
-- Table `student_db`.`semester`
```

```
-----  
DROP TABLE IF EXISTS `student_db`.`semester` ;
```

```
CREATE TABLE IF NOT EXISTS `student_db`.`semester` (  
  `semester_season` VARCHAR(45) NOT NULL,  
  `semester_year` VARCHAR(45) NOT NULL,  
  PRIMARY KEY (`semester_season`, `semester_year`))  
ENGINE = InnoDB;
```

```
-----  
-- Table `student_db`.`student_course`  
-----
```

```
DROP TABLE IF EXISTS `student_db`.`student_course` ;
```

```
CREATE TABLE IF NOT EXISTS `student_db`.`student_course` (  
  `s_id` INT NOT NULL,  
  `c_id` INT NOT NULL,  
  `semester_season` VARCHAR(45) NULL,  
  `semester_year` VARCHAR(45) NULL,  
  `grade` INT NULL,  
  `students_student_id` INT NOT NULL,  
  `courses_course_code` INT NOT NULL,  
  `semester_semester_season` VARCHAR(45) NOT NULL,  
  `semester_semester_year` VARCHAR(45) NOT NULL,  
  `semester_semester_season1` VARCHAR(45) NOT NULL,  
  `semester_semester_year1` VARCHAR(45) NOT NULL,  
  PRIMARY KEY (`students_student_id`, `courses_course_code`, `semester_semester_season`,  
  `semester_semester_year`, `semester_semester_season1`, `semester_semester_year1`),  
  CONSTRAINT `fk_student_course_students1`  
  FOREIGN KEY (`students_student_id`)
```

```

REFERENCES `student_db`.`students` (`student_id`)
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT `fk_student_course_courses1`
FOREIGN KEY (`courses_course_code`)
REFERENCES `student_db`.`courses` (`course_code`)
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT `fk_student_course_semester1`
FOREIGN KEY (`semester_semester_season`, `semester_semester_year`)
REFERENCES `student_db`.`semester` (`semester_season`, `semester_year`)
ON DELETE NO ACTION
ON UPDATE NO ACTION,
CONSTRAINT `fk_student_course_semester2`
FOREIGN KEY (`semester_semester_season1`, `semester_semester_year1`)
REFERENCES `student_db`.`semester` (`semester_season`, `semester_year`)
ON DELETE NO ACTION
ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE INDEX `fk_student_course_courses1_idx` ON `student_db`.`student_course`
(`courses_course_code` ASC);

CREATE INDEX `fk_student_course_semester1_idx` ON `student_db`.`student_course`
(`semester_semester_season` ASC, `semester_semester_year` ASC);

CREATE INDEX `fk_student_course_semester2_idx` ON `student_db`.`student_course`
(`semester_semester_season1` ASC, `semester_semester_year1` ASC);

-- -----
-- Table `student_db`.`semester_course`

```

DROP TABLE IF EXISTS `student_db`.`semester_course` ;

```
CREATE TABLE IF NOT EXISTS `student_db`.`semester_course` (  
  `c_id` INT NULL,  
  `prof_id` INT NULL,  
  `semester_season` VARCHAR(45) NULL,  
  `semester_year` VARCHAR(45) NULL,  
  `semester_semester_season` VARCHAR(45) NOT NULL,  
  `semester_semester_year` VARCHAR(45) NOT NULL,  
  `semester_semester_season1` VARCHAR(45) NOT NULL,  
  `semester_semester_year1` VARCHAR(45) NOT NULL,  
  `courses_course_code` INT NOT NULL,  
  `professors_professor_id` INT NOT NULL,  
  PRIMARY KEY (`semester_semester_season`, `semester_semester_year`,  
  `semester_semester_season1`, `semester_semester_year1`, `courses_course_code`,  
  `professors_professor_id`),  
  CONSTRAINT `fk_semester_course_semester1`  
    FOREIGN KEY (`semester_semester_season`, `semester_semester_year`)  
    REFERENCES `student_db`.`semester` (`semester_season`, `semester_year`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION,  
  CONSTRAINT `fk_semester_course_semester2`  
    FOREIGN KEY (`semester_semester_season1`, `semester_semester_year1`)  
    REFERENCES `student_db`.`semester` (`semester_season`, `semester_year`)  
    ON DELETE NO ACTION  
    ON UPDATE NO ACTION,  
  CONSTRAINT `fk_semester_course_courses1`  
    FOREIGN KEY (`courses_course_code`)  
    REFERENCES `student_db`.`courses` (`course_code`)  
    ON DELETE NO ACTION
```

```
ON UPDATE NO ACTION,  
CONSTRAINT `fk_semester_course_professors1`  
FOREIGN KEY (`professors_professor_id`)  
REFERENCES `student_db`.`professors` (`professor_id`)  
ON DELETE NO ACTION  
ON UPDATE NO ACTION)  
ENGINE = InnoDB;  
  
CREATE INDEX `fk_semester_course_semester2_idx` ON `student_db`.`semester_course`  
(`semester_semester_season1` ASC, `semester_semester_year1` ASC);  
  
CREATE INDEX `fk_semester_course_courses1_idx` ON `student_db`.`semester_course`  
(`courses_course_code` ASC);  
  
CREATE INDEX `fk_semester_course_professors1_idx` ON `student_db`.`semester_course`  
(`professors_professor_id` ASC);  
  
SET SQL_MODE=@OLD_SQL_MODE;  
SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;  
SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;
```