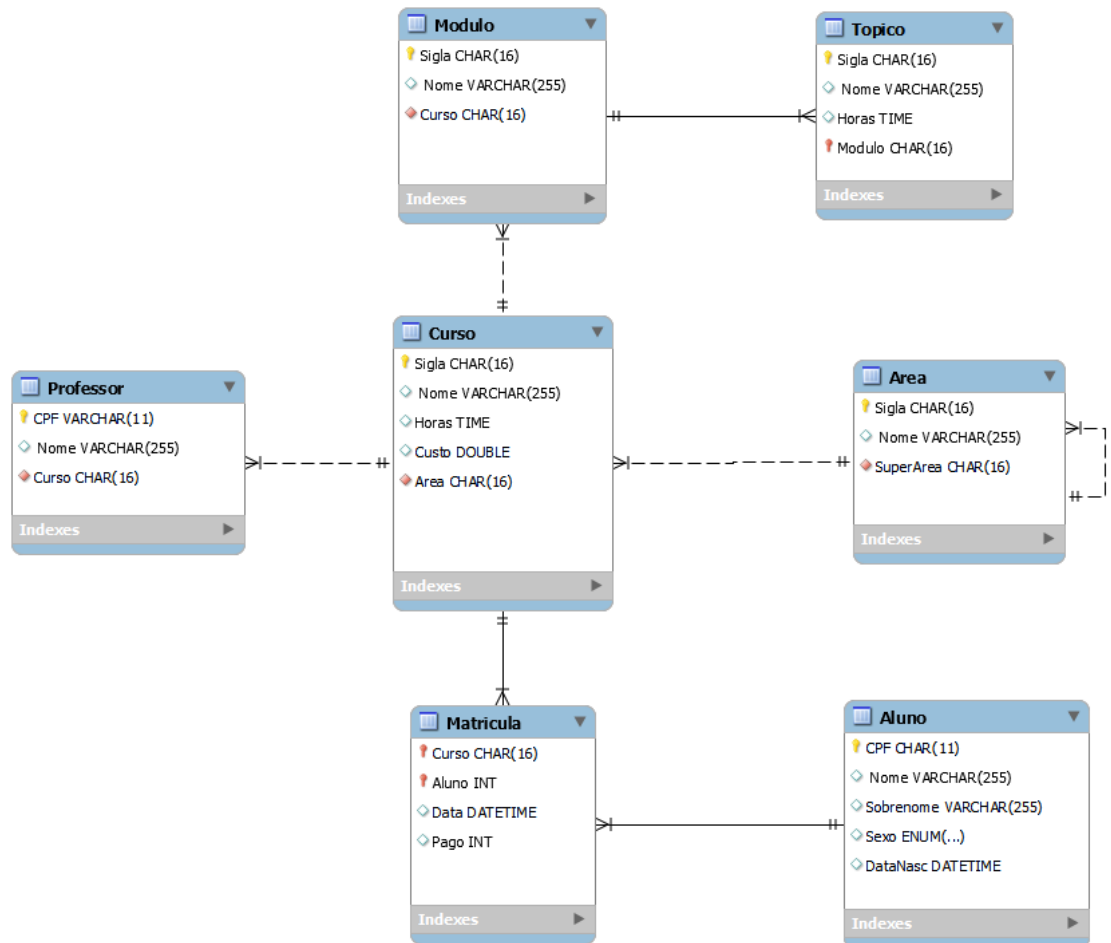**Banco de Dados**

812839 – Vinícius Miranda de Araújo

Hands On 06

1. Diagrama

2. Script

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

CREATE TABLE IF NOT EXISTS `SAM`.`Area` (
  `Sigla` CHAR(16) NOT NULL,
  ` Nome` VARCHAR(255) NULL,
  `SuperArea` CHAR(16) NOT NULL,
  PRIMARY KEY (`Sigla`),
  INDEX `fk_Area_Area1_idx` (`SuperArea` ASC) VISIBLE,
  CONSTRAINT `fk_Area_Area1`
    FOREIGN KEY (`SuperArea`)
    REFERENCES `SAM`.`Area` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;

CREATE TABLE IF NOT EXISTS `SAM`.`Curso` (
  `Sigla` CHAR(16) NOT NULL,
  ` Nome` VARCHAR(255) NULL,
  `Horas` TIME NULL,
  `Custo` DOUBLE NULL,
  `Area` CHAR(16) NOT NULL,
  PRIMARY KEY (`Sigla`),
  INDEX `fk_Curso_Area_idx` (`Area` ASC) VISIBLE,
```

```sql
    CONSTRAINT `fk_Curso_Area`
      FOREIGN KEY (`Area`)
      REFERENCES `SAM`.`Area` (`Sigla`)
      ON DELETE NO ACTION
      ON UPDATE NO ACTION)
ENGINE = InnoDB;


CREATE TABLE IF NOT EXISTS `SAM`.`Modulo` (
  `Sigla` CHAR(16) NOT NULL,
  ` Nome` VARCHAR(255) NULL,
  `Curso` CHAR(16) NOT NULL,
  PRIMARY KEY (`Sigla`),
  INDEX `fk_Modulo_Curso1_idx` (`Curso` ASC) VISIBLE,
  CONSTRAINT `fk_Modulo_Curso1`
    FOREIGN KEY (`Curso`)
    REFERENCES `SAM`.`Curso` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;


CREATE TABLE IF NOT EXISTS `SAM`.`Topico` (
  `Sigla` CHAR(16) NOT NULL,
  ` Nome` VARCHAR(255) NULL,
  `Horas` TIME NULL,
  `Modulo` CHAR(16) NOT NULL,
  PRIMARY KEY (`Sigla`, `Modulo`),
  INDEX `fk_Topico_Modulo1_idx` (`Modulo` ASC) VISIBLE,
```

```sql
  CONSTRAINT `fk_Topico_Modulo1`
    FOREIGN KEY (`Modulo`)
    REFERENCES `SAM`.`Modulo` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;


CREATE TABLE IF NOT EXISTS `SAM`.`Aluno` (
  `CPF` CHAR(11) NOT NULL,
  ` Nome` VARCHAR(255) NULL,
  `Sobrenome` VARCHAR(255) NULL,
  `Sexo` ENUM('M', 'F', 'Outro') NULL,
  `DataNasc` DATETIME NULL,
  PRIMARY KEY (`CPF`))
ENGINE = InnoDB;


CREATE TABLE IF NOT EXISTS `SAM`.`Professor` (
  `CPF` VARCHAR(11) NOT NULL,
  ` Nome` VARCHAR(255) NULL,
  `Curso` CHAR(16) NOT NULL,
  PRIMARY KEY (`CPF`),
  INDEX `fk_Professor_Curso1_idx` (`Curso` ASC) VISIBLE,
  CONSTRAINT `fk_Professor_Curso1`
    FOREIGN KEY (`Curso`)
    REFERENCES `SAM`.`Curso` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
```

```
ENGINE = InnoDB;


CREATE TABLE IF NOT EXISTS `SAM`.`Matricula` (
  `Curso` CHAR(16) NOT NULL,
  `Aluno` INT NOT NULL,
  `Data` DATETIME NULL,
  `Pago` INT NULL,
  PRIMARY KEY (`Curso`, `Aluno`),
  INDEX `fk_Curso_has_Aluno_Aluno1_idx` (`Aluno` ASC) VISIBLE,
  INDEX `fk_Curso_has_Aluno_Curso1_idx` (`Curso` ASC) VISIBLE,
  CONSTRAINT `fk_Curso_has_Aluno_Curso1`
    FOREIGN KEY (`Curso`)
    REFERENCES `SAM`.`Curso` (`Sigla`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION,
  CONSTRAINT `fk_Curso_has_Aluno_Aluno1`
    FOREIGN KEY (`Aluno`)
    REFERENCES `SAM`.`Aluno` (`CPF`)
    ON DELETE NO ACTION
    ON UPDATE NO ACTION)
ENGINE = InnoDB;
```