

# BÀI GIẢNG CƠ SỞ DỮ LIỆU

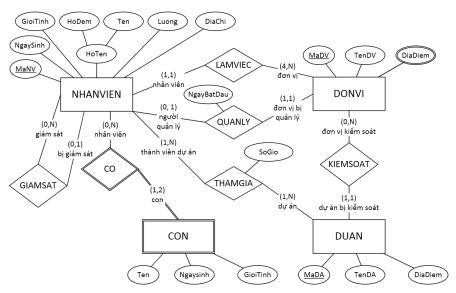
7. Mô hình quan hệ:

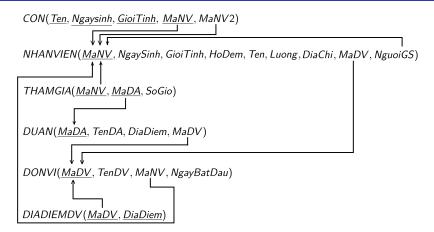
Mã lệnh SQL để tạo bảng và tham chiếu khóa ngoài

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#### Lươc đồ ER CONGTY





```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN (MaNV, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDV, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
create table CON(Ten varchar(64), NgaySinh date, GioiTinh varchar(8),
   MaNV varchar(16), ManV2 varchar(16),
   primary key(Ten, NgaySinh, GioiTinh, ManV));
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN (MaNV, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDV, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN(MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
create table NHANVIEN(MaNV varchar(16), NgaySinh date, GioiTinh varchar(8),
   HoDem varchar(32), Ten varchar(16), Luong real, DiaChi varchar(128),
   MaDV varchar(16), NguoiGS varchar(16),
   primary key(MaNV));
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
create table THAMGIA(MaNV varchar(16), MaDA varchar(16),
SoGio real,
primary key(MaNV, MaDA));
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN (MaNV, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDV, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
create table DUAN(MaDA varchar(16), TenDA varchar(256),
DiaDiem varchar(128), MaDV varchar(16),
primary key(MaDA));
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
create table DONVI(MaDV varchar(16), TenDV varchar(128),
MaNV varchar(16), NgayBatDau date,
primary key(MaDV));
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
create table DIADIEMDV(MaDV varchar(16),
DiaDiem varchar(128),
primary key(MaDV, DiaDiem));
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
alter table CON add constraint FK_CON_NHANVIEN1
foreign key (MaNV) references NHANVIEN(MaNV);
alter table CON add constraint FK_CON_NHANVIEN2
foreign key (MaNV2) references NHANVIEN(MaNV);
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
alter table NHANVIEN add constraint FK_NHANVIEN_DONVI
foreign key (MaDV) references DONVI(MaDV);
alter table NHANVIEN add constraint FK_NHANVIEN_NHANVIEN
foreign key (NguoiGS) references NHANVIEN(MaNV);
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
alter table THAMGIA add constraint FK_THAMGIA_DUAN
foreign key (MaDA) references DUAN(MaDA);
alter table THAMGIA add constraint FK_THAMGIA_NHANVIEN
foreign key (MaNV) references NHANVIEN(MaNV);
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
alter table DUAN add constraint FK_DUAN_DONVI
foreign key (MaDV) references DONVI(MaDV);
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
alter table DONVI add constraint FK_DONVI_NHANVIEN
    foreign key (MaNV) references NHANVIEN(MaNV);
```

```
CON(Ten, Ngaysinh, GioiTinh, MaNV, MaNV2)
NHANVIEN(Manv, NgaySinh, GioiTinh, HoDem, Ten, Luong, DiaChi, MaDv, NguoiGS)
THAMGIA(MaNV, MaDA, SoGio)
DUAN (MaDA, TenDA, DiaDiem, MaDV)
DONVI(MaDV, TenDV, MaNV, NgayBatDau)
DIADIEMDV (MaDV, DiaDiem)
```

```
alter table DIADIEMDV add constraint FK_DIADIEMDV_DONVI foreign key (MaDV) references DONVI(MaDV);
```

