

UNITS CURRENTLY APPROVED			REPORT DATE: 22/03/2020
Unit Number	Unit Name	Unit Description	Unit Value
FIT9131	Programming Foundations	Introduction to programming	6
FIT9132	Introduction to Databases	Database Fundamentals	6
FIT9134	Computer Architecture and Operating Systems	Fundamentals of computer systems and the computing environment	6
FIT9135	Data Communications	Fundamentals of data and computer communications	6

\* Unit value may be either 3, 6 or 12 points

### UNF

UNIT (unit\_no, unit\_name, unit\_desc, unit\_value)

### 1NF

UNIT (unit\_no, unit\_name, unit\_desc, unit\_value)

Partial Dependencies:

No Partial Dependency

### 2NF

UNIT (unit\_no, unit\_name, unit\_desc, unit\_value)

Transitive Dependencies:

No transitive dependencies

### 3NF

UNIT (unit\_no, unit\_name, unit\_desc, unit\_value)

Full Dependencies:

unit\_no -> unit\_name, unit\_desc, unit\_value

LECTURER DETAILS		REPORT DATE: 22/03/2020
<b>LECTURER'S NUMBER:</b> 10234 <b>LECTURER'S NAME:</b> GUISEPPE BLOGGS <b>LECTURER'S OFFICE No.:</b> 169 <b>LECTURER'S PHONE No.:</b> 99037111		
<b>UNIT ADVISER FOR:</b>		
UNIT NUMBER		UNIT NAME
FIT9131		Programming Foundations
FIT9134		Computer Architecture and Operating Systems

\* A given unit may have several advisers

\* Some lecturers share offices, although each has their own phone

#### UNF

**LECTURER** (lecturer\_no, lecturer\_name, lecturer\_office, lecturer\_phone, (unit\_no, unit\_name))

#### 1NF

**LECTURER** (lecturer\_no, lecturer\_name, lecturer\_office, lecturer\_phone)

**ADVISER** (lecturer\_no, unit\_no, unit\_name)

Partial Dependencies:

unit\_no → unit\_name

#### 2NF

**LECTURER** (lecturer\_no, lecturer\_name, lecturer\_office, lecturer\_phone)

**ADVISER** (lecturer\_no, unit\_no)

**UNIT** (unit\_no, unit\_name)

Transitive Dependencies:

No transitive dependencies

#### 3NF:

**LECTURER** (lecturer\_no, lecturer\_name, lecturer\_office, lecturer\_phone)

**ADVISER** (lecturer\_no, unit\_no)

**UNIT** (unit\_no, unit\_name)

Full Dependencies:

lecturer\_no → lecturer\_name, lecturer\_office, lecturer\_phone

unit\_no → unit\_name

STUDENT DETAILS			REPORT DATE: 22/03/2020
<b>STUDENT No.:</b> 12345678 <b>STUDENT NAME:</b> Poindexter Jones <b>STUDENT ADDRESS:</b> 23 Wide Road, Caulfield, 3162 <b>COURSE ENROLLED:</b> MIT <b>MODE OF STUDY:</b> On-Campus  <b>MENTOR NUMBER:</b> 10234 <b>MENTOR NAME:</b> Guiseppe Bloggs  <b>ACADEMIC RECORD:</b>			
UNIT NUMBER	UNIT NAME	YEAR / SEMESTER	GRADE
FIT9131	Programming Foundations	2017/2	N
FIT9131	Programming Foundations	2018/1	D
FIT9132	Introduction to Databases	2018/1	D

\* Grade may have the value N, P, C, D or HD

\* Mode of Study must be On-campus (O) or Distance Education (D)

In order to add a student, the lecturer who advises this student must already exist in the database. No lecturer who advises any students may be deleted from the database. If the lecturer number of a lecturer is changed, then the number would be changed for each student advised by that lecturer.

#### UNF

**STUDENT** (student\_no, student\_name, student\_address, student\_course, study\_mode, lecturer\_no, lecturer\_name, (unit\_no, unit\_name, unit\_year, unit\_semester, unit\_grade))

#### 1NF

**STUDENT** (student\_no, student\_name, student\_address, student\_course, study\_mode, lecturer\_no, lecturer\_name)

**ACADEMIC\_RECORD** (student\_no, unit\_no, unit\_year, unit\_semester, unit\_name, unit\_grade)

Partial Dependencies:

unit\_no → unit\_name

#### 2NF

**STUDENT** (student\_no, student\_name, student\_address, student\_course, study\_mode, lecturer\_no, lecturer\_name)

**ACADEMIC\_RECORD** (student\_no, unit\_no, unit\_year, unit\_semester, unit\_grade)

**UNIT** (unit\_no, unit\_name)

Transitive Dependencies:

Lecturer\_no -> lecturer\_name

### 3NF

**STUDENT** (student\_no, student\_name, student\_address, student\_course, study\_mode, lecturer\_no)

**ACADEMIC\_RECORD** (student\_no, unit\_no, unit\_year, unit\_semester, unit\_grade)

**UNIT** (unit\_no, unit\_name)

**LECTURER** (lecturer\_no, lecturer\_name)

Full dependencies:

student\_no -> student\_name, student\_address, student\_course, study\_mode, lecturer\_no

student\_no, unit\_no, unit\_year, unit\_semester -> unit\_grade

Unit\_no -> unit\_name

lecturer\_no -> lecturer\_name

### COLLECTED 3NF RELATIONS

1. **UNIT** (unit\_no, unit\_name, unit\_desc, unit\_value)

2. **LECTURER** (lecturer\_no, lecturer\_name, lecturer\_office, lecturer\_phone)

3. **ADVISER** (lecturer\_no, unit\_no)

4. **UNIT** (unit\_no, unit\_name)

5. **STUDENT** (student\_no, student\_name, student\_address, student\_course, study\_mode, lecturer\_no)

6. **ACADEMIC\_RECORD** (student\_no, unit\_no, unit\_year, unit\_semester, unit\_grade)

7. **UNIT** (unit\_no, unit\_name)

8. **LECTURER** (lecturer\_no, lecturer\_name)

### ATTRIBUTE SYNTHESIS

1 & 4 & 7

**UNIT** (unit\_no, unit\_name, unit\_desc, unit\_value)

2 & 8

**LECTURER** (lecturer\_no, lecturer\_name, lecturer\_office, lecturer\_phone)

3

**ADVISER** (lecturer\_no, unit\_no)

5

**STUDENT** (student\_no, student\_name, student\_address, student\_course, study\_mode, lecturer\_no)

6

**ACADEMIC\_RECORD** (student\_no, unit\_no, unit\_year, unit\_semester, unit\_grade)