

# UNIT & LECTURER Forms

| UNITS CURRENTLY APPROVED |   |  | REPORT DATE:<br>22/07/2022 |
|--------------------------|---|--|----------------------------|
| 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

| LECTURER DETAILS   |   | REPORT DATE: 22/07/2022 |
|--|---|-------------------------|
| <b>LECTURER'S NUMBER:</b> 10234<br><b>LECTURER'S NAME:</b> GUISEPPE BLOGGS<br><b>LECTURER'S OFFICE No.:</b> 169<br><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

To add a student, the lecturer who advises that 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.

## UNIT Form

### UNF

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

### 1NF

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

CK:

- (unit\_no)
- (unit\_no, unit\_name)
- (unit\_no, unit\_description)
- (unit\_no, unit\_value)

**Partial Dependencies:**

None

**2NF**

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

**Transitive Dependencies:**

None: No Transitive Dependencies

**3NF**

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

**Full Dependencies:**

unit\_no → unit\_name, unit\_description, unit\_value

**LECTURER Form**

| UNITS CURRENTLY APPROVED |   |  | REPORT DATE:<br>22/07/2022 |
|--------------------------|---|--|----------------------------|
| 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

| LECTURER DETAILS   |   | REPORT DATE: 22/07/2022 |
|--|---|-------------------------|
| <b>LECTURER'S NUMBER:</b> 10234<br><b>LECTURER'S NAME:</b> GUISEPPE BLOGGS<br><b>LECTURER'S OFFICE No.:</b> 169<br><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** (lect\_no, lect\_name, lect\_office\_no, lect\_phone\_no, (unit\_no, unit\_name))

## 1NF

**LECTURER** (lect\_no, lect\_name, lect\_office\_no, lec\_phone\_no)

**ADVICE** (lect\_no, unit\_no, unit\_name)

## CK:

LECTURER:

- lect\_no
- lect\_phone\_no

ADVICE:

- lect\_no
- unit\_no

**Patial Dependencies:**

unit\_no → unit\_name

**2NF**

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

**ADVICE** (lect\_no, unit\_no)

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

**Transitive dependencies:**

None

Note: lect\_phone\_no is a candidate key and is a key, not a non-key attribute, even though we have not chosen it as a primary key.

**3NF**

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

**ADVICE** (lect\_no, unit\_no)

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

**Full Dependencies:**

lect\_no → lect\_name, lect\_office\_no, lect\_phone\_no

unit\_no → unit\_name

## **STUDENT Form**

| <b>STUDENT DETAILS</b>  |                           |                 | <b>REPORT DATE:</b><br>22/07/2022 |
|---|---------------------------|-----------------|-----------------------------------|
| <b>STUDENT No.:</b> 12345678<br><b>STUDENT NAME:</b> Poindexter Jones<br><b>STUDENT ADDRESS:</b> 23 Wide Road, Caulfield, 3162<br><b>COURSE ENROLLED:</b> MIT<br><b>MODE OF STUDY:</b> On-Campus<br><br><b>MENTOR NUMBER:</b> 10234<br><b>MENTOR NAME:</b> Guiseppe Bloggs<br><br><b>ACADEMIC RECORD:</b> |                           |                 |                                   |
| UNIT NUMBER   | UNIT NAME                 | YEAR / SEMESTER | GRADE                             |
| FIT9131   | Programming Foundations   | 2021/2          | N                                 |
| FIT9131   | Programming Foundations   | 2022/1          | D                                 |
| FIT9132   | Introduction to Databases | 2022/1          | D                                 |

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

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

## **UNF**

**STUDENT** (student\_no, student\_name, student\_address, student\_course\_erolled, student\_mode\_of\_study, student\_mentor\_no, student\_mentor\_name, (student\_unit\_no, student\_unit\_name, (student\_unit\_year, student\_unit\_semester), student\_unit\_grade))

## **1NF**

**STUDENT** (student\_no, student\_name, student\_address, student\_course\_erolled, student\_mode\_of\_study, mentor\_no, mentor\_name)

**ENROLMENT** (unit\_no, student\_no, unit\_name, enrol\_year, enrol\_semester, unit\_grade)

CKs:

### **STUDENT**

- student\_no

### **ENROLMENT**

- unit\_no, student\_no, enrol\_year, enrol\_semester

### Partial Dependencies:

unit\_no → unit\_name

### 2NF

**STUDENT** (student\_no, student\_name, student\_address, student\_course\_erolled, student\_mode\_of\_study, mentor\_no, mentor\_name)

**ENROLMENT** (unit\_no, student\_no, enrol\_year, enrol\_semester, unit\_grade)

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

### Transitive dependencies:

mentor\_no → mentor\_name

### 3NF

**STUDENT** (student\_no, student\_name, student\_address, student\_course\_erolled, student\_mode\_of\_study, mentor\_no)

**ENROLMENT** (unit\_no, student\_no, enrol\_year, enrol\_semester, unit\_grade)

**MENTOR** (mentor\_no, mentor\_name)

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

### Full Dependencies:

student\_no → student\_name, student\_address, student\_course\_enrolled, student\_mode\_of\_study, mentor\_no

mentor\_no → mentor\_name

unit\_no, student\_no, enrol\_year, enrol\_semester → unit\_grade,

unit\_no → unit\_name

## **FINAL:**

**STUDENT** (student\_no, student\_name, student\_address, student\_course\_erolled,  
student\_mode\_of\_study, mentor\_no)

**ENROLMENT** (unit\_no, student\_no, enrol\_year, enrol\_semester, unit\_grade)

**MENTOR** (mentor\_no, mentor\_name)

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

# Attributes Synthesis

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

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

**ADVICE** (lect\_no, unit\_no)

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

**STUDENT** (student\_no, student\_name, student\_address, student\_course\_erolled,  
student\_mode\_of\_study, mentor\_no)

**ENROLMENT** (unit\_no, student\_no, enrol\_year, enrol\_semester, unit\_grade)

**MENTOR** (mentor\_no, mentor\_name)

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

Note: lecturer = mentor