



# Fundamentals of Data Management

## Pass Tasks 3.1: Entity Relationship Modelling

### Overview

In this tutorial, you will practice reading and analyzing user requirements / business rules and design an Entity Relationship Model and present it in an Entity Relationship Diagram.

### Purpose

Learn to read and analyse user requirements and design ER model

### Task

Read, analyse and design the ER Model for the business scenarios presented in the tasks below. You can choose ER Diagrams (Chen or Crow's feet) or UML diagrams to show your solutions.

### Time

This task should be completed in your third lab class and submitted for feedback in the third lab or at the beginning of lab 4.

### Resources

- Online module (from Canvas)
- Connolly & Begg, Database Systems, Chapters 12 and 16
- Stephens, Beginning Database Design Solutions, <http://goo.gl/bRCaxF>

Online resources

- Chen notation tutorial

<http://creately.com/blog/diagrams/er-diagrams-tutorial/>

- Crow's feet notation tutorial

<http://www.w3computing.com/systemsanalysis/systems-entity-relationship-model/>

### Feedback

Discuss your solutions with the tutorial instructor.

### Next

Get started on module 4.

## Pass Tasks 3.1 — Submission Details and Assessment Criteria

Document your solutions to the tasks using a word processor or other suitable editor. Upload the document to Doubtfire as pdf. The tutors will discuss them with you in the lab.

## Subtask 3.1.2

Consider the following table

Training

P_Cod e	P_Name	Instruct or	Term	Duration (Hrs)	Hourly_Rate	Room_N O
P1	Visual Basic	Dennis	15-1	7	20	A1
P1	Visual Basic	Dennis	15-2	7	30	A2
P2	SQL	Jason	15-1	4	10	A4
P2	SQL	Jason	15-2	4	20	A5
P3	C++	Joseph	15-1	5	30	A3
P3	C++	Joseph	15-2	5	20	A7
P4	Java	Rys	15-2	6	10	A9

Identify the most suitable primary key for the table above and explain how this key uniquely defines all other attributes.

Document and upload.