

# Data Flow Diagram Practice 3

*34 Marks*

Design a data flow diagram (DFD) for an Online Course Enrolment System at a university.

- Students can browse available courses, enrol in courses, view their current enrolment status, and check their grades.
- Instructors can create new courses, update course details, and submit student grades.
- The system integrates with a Payment Gateway to handle course fees.
- University Administration staff can manage student accounts and course offerings.
- The system needs to maintain Student Records, an Available Course Catalogue, Enrolment Information, Payment Transactions, and Grade Records.

Task:

1. Draw a Level 0 Data Flow Diagram for this Online Course Enrolment System.
2. Decompose the "Manage Student Enrolment" process to Level 1, showing more detailed sub-processes and data flows involved when a student enrolls in a course.

# Data Flow Diagram Practice 3 Mark Guide

34 Marks

## Level 0

Symbolisation	Marks	Logic and structure	Marks
<b>External Entities</b>	Provides correct symbol for data source [1 mark]	External Entities	Student [1 mark] Instructor [1 mark] Payment Gateway [1 mark] University Administration [1 mark]
<b>Processes</b>	Provides correct symbol for Processes [1 mark]	Processes	Manage Courses [1 mark] Enrol Students [1 mark] Manage Grades [1 mark] Process Payments [1 mark] Manage Accounts [1 mark]
<b>Data Stores</b>	Provides correct symbol for data store [1 mark]	Data Stores	D: Data Store [1 mark]
<b>Data flows</b>	Provides correct arrows with one way flow [1 mark]  Provides correct labels that explain relationships [1 mark]	Data flows	Data flows for Level 0 between all identified entities, processes, and data stores as described in the scenario [3 marks]

## Level 1

Symbolisation	Marks	Logic and structure	Marks
<b>External Entities</b>	Provides correct symbol for data source [1 mark]	External Entities	Student [1 mark] Payment Gateway [1 mark]
<b>Processes</b>	Provides correct symbol for Processes [1 mark]	Processes	Browse Courses [1 mark] Select Course [1 mark] Submit Enrolment Request [1 mark] Validate Enrolment [1 mark] Process Course Payment [1 mark] Update Enrolment Status [1 mark]
<b>Data Stores</b>	Provides correct symbol for data store [1 mark]	Data Stores	D: Data Store [1 mark]
<b>Data flows</b>	Provides correct arrows with one way flow [1 mark]  Provides correct labels that explain relationships [1 mark]	Data flows	Data flows for Level 0 between all identified entities, processes, and data stores as described in the scenario [3 marks]