INSTITUTE OF MANAGEMENT & INFORMATION TECHNOLOGY
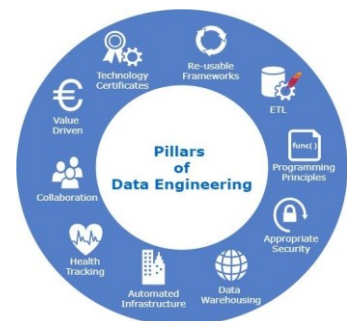
COMPACT

FACTSHEET

DATA ENGINEERING

PLUS ETL

1.   Position of the course Data Engineering *Plus* ETL (DEpTL)

The course is offered by the Institute of Management and Information Technology (IMIT) in the context of the HBO training   Business ICT Management. This training is   accredited   by the National Accreditation Body (NOVA). IMIT is also recognized by the Ministry of Education, Science & Culture MINOWC).

2.   Context DEpTL

Data Engineering is a vital area within modern IT architectures, focusing on collecting, processing and structuring data for analysis and business decision-making. **ETL** is a fundamental component in modern data pipelines (Extracting data from various sources (databases, APIs, flat files)).

DEpTL is aligned with industry practices and is structured to blend theoretical knowledge with practical team-based assignments.

Turning raw data into business gold—one pipeline at a time.

ETL stands for Extract, Transform, Load. It is a process used to move and prepare data from different sources so that it can be stored and analyzed in a central system. The first phase, Extract, involves retrieving data from one or more source systems, which may include databases, spreadsheets, APIs, or cloud applications.

3.   Entry level DEpTL

Participants are expected to have basic knowledge of databases, SQL, file structures, IT architecture and general IT knowledge. Some experience with programming (e.g., Python) is considered a plus.

Training Overview

DEpTL is a (blended) course on Education Level 2/3, programmed as a second/third year course.

Learning Outcomes

By the end of this course, students will understand the role of data engineering in both business and IT environments, be able to design and implement ETL processes using industry-standard tools, and build scalable data pipelines.

Learning objectives DEpTL

The learning objectives of the blended course DEpTL cover both Data Engineering skills and proficiency in using ETL Tools. Key learning objectives include:

1. **Understand the core principles and value of data engineering:**
2. **Explore the impact of emerging technologies on data engineering practices**
3. **Assess the readiness of systems and teams for data engineering projects**

By the end of the course, students should be able to analyze data-related business objectives, model data pipeline requirements, design ETL and data engineering solutions, implement ETL processes using tools such as SQL, Talend, or Python, and evaluate the effectiveness and scalability of the data pipelines.

4. DEpTL Blended Study Plan

Course	Date	Course/subject	Material
		Week 1: Introduction to Data Engineering	
		Week 2: Building Data Pipelines	
		Week 3: Data Modeling & Storage	
		Week 5: ETL Workflow Orchestration	
		Week 5: Real-time Data and Streaming	
		Week 6: Data Quality & Governance	
		Week7: Preparation Exam & Reflection Paper	

5. Practical Demo Examination

Case 1: Sales Performance Dashboard
Case 2: Customer Segmentation Analysis
Case 3: Inventory & Stock Review
Case 4: Employee productivity dashboard
Case 5: Website Traffic Reporting
Case 6: Simple Financial Overview (Revenue vs Expenses)

INVESTMENT USD 800 ALL IN

*Minimum Technical Requirements * Laptop i5+ / 16+ GB memory / Free Disk space 500 GB*

6. About the trainer

A dedicated IT Supervisor with 7 years of experience in managing and optimizing business-critical applications, data processes, and IT systems. Specialized in application management, data reporting, system integrations, and test coordination, with strong expertise in compliance (ISO 9001 & ISMS), robotic process automation (RPA), and business process improvement. Known for translating business needs into efficient technical solutions, coordinating release planning, guiding application-related projects, and supporting user-focused system development across web, mobile, and on-premise platforms. Combines hands-on technical skill with a strategic mindset to improve performance and reliability within organizations.

Education / Certification

1. IMIT (HBO) – Business Information Management (Bachelors)

2. UiPath Academy – RPA Associate Certification

3. Kernel IT – Data Analytics (MS PL-300 & DP-900)

4. Fortinet – Fortinet Network Security Expert 1,2 & 3

5. Leap Solutions – Power BI Development

IMIT
Dr. Ing. Urwin W. Staphorst MBA

DEpTL is an integral part of the IMIT education program accredited by the "National Orgaan voor Accreditatie" NOVA. IMIT is recognized by The Ministry of Education, Science and Culture.

Subject to Change

Study Guide Blended IMIT Course Data Engineering plus ETL, 2025, Lecturer: Bc. Prithvi Odit, Paramaribo, Suriname