

Microsoft Skills For Jobs

Microdegree Program

**Data
Analyst**

Domain Knowledge
Technical Skills
Soft Skills

SQL
Problem-Solving

Excel Data

Critical Thinking

Visualization

Communication

Python/R

LEARNER-CENTRIC | WORLD-CLASS | FUTURE-READY | GLOBAL EMPLOYABILITY | PATHWAY TO HIGHER EDUCATION

A joint program by Microsoft, KAMK University, Leading EU Universities and Global Tech Companies with European Higher Education Transfer Credits (ECTS)



DATA ANALYST

SELF-PACED | 7 CERTIFICATES | ONLINE | IN-CLASS MENTORSHIP | ASSIGNMENTS AND EXAM BASED

IN PARTNERSHIP WITH GLOBAL MENTOR COMPANIES

DATA ANALYST MICRODEGREE PROGRAM BROUGHT TO YOU BY





What is it?

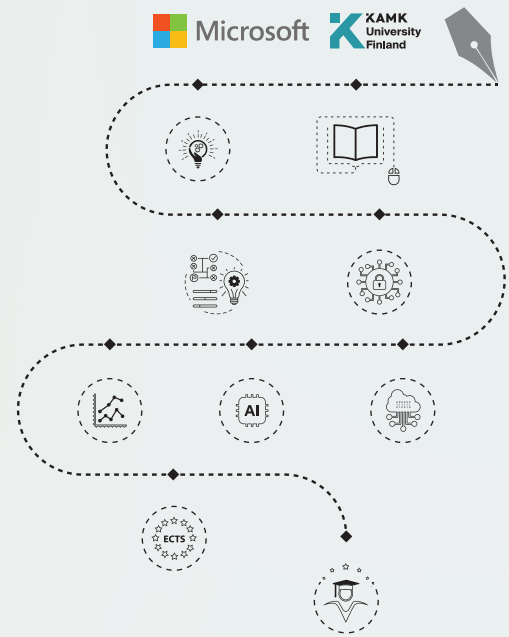
The Microsoft Skills for Jobs Microdegree Program is designed to help you build **real-world tech skills** that employers want and a pathway for higher studies in EU countries.

Microdegree Programs focuses on **in-demand technology** areas like cybersecurity, cloud computing, Low code tool set, AI, data analytics, and more. The program is built around **practical, job-relevant skills and uses a flexible, self-paced learning** model that fits your schedule.

Whether you are a student, recent graduate, freelancer, technology professional, career changer, or an individual seeking skills for employment without pursuing a full degree or diploma, this program is tailored for you.

You will learn through high-quality courses jointly developed by **Microsoft, in partnership with KAMK University of Applied Sciences (Finland), leading EU universities and global tech companies (GTC).**

The courses follow the **European Credit Transfer and Accumulation System (ECTS)**, meaning your credits and certificates are internationally recognized for quality international and local jobs and higher studies in EU countries. The Microsoft Skills for Job Microdegree Program is an online program designed for self-paced learning, with in-class mentorship (region-specific) to support your journey.



You will receive:

- ECTS credits for each course
- Digital badges
- Course Certificates from Microsoft and KAMK University
- Professional Certificate from Microsoft and KAMK University



Concepts &
Technologies



ECTS
Credits



Course
Certificates



LinkedIn
Badge



Online
Verification



International
Jobs



Local
Jobs



Study
Abroad



Microdegree Program Goals



Validate your skills and knowledge for the global job market



Gain a competitive edge in today's evolving employment landscape



Upskill or reskill to support career growth and advancement



Bridge the gap between academic learning and real-world industry demands



Create a pathway to higher education opportunities in EU countries



Promote lifelong learning through flexible, targeted, and accessible education

The Microdegree Program is Designed For



University students seeking hands-on, career-relevant qualifications



Job seekers aiming to stand out in a competitive recruitment process



Career changers acquiring new digital skills to enter the IT industry



Freelancers looking to expand services and increase earning potential



Working professionals focused on efficient upskilling or reskilling



Organizations investing in certified microlearning for employee development



Students planning for higher education in European & North American Universities

Data Analyst Microdegree Program

A **Data Analyst** is a technology professional who transforms structured & unstructured data into actionable insights that drive smarter decisions. They sit at the intersection of business and technology, applying statistical techniques, data modeling, & visualization tools to bridge the gap between raw information and strategic decision-making. In practice, data analysts gather information from multiple sources-such as databases, spreadsheets, APIs, and cloud platforms-then clean, transform, & standardize it for accuracy. Using tools like **SQL, Microsoft Power BI, Excel**, & programming languages like **Python or R**, they conduct descriptive, diagnostic, & exploratory analysis to uncover trends, anomalies, & correlations. Beyond processing data, analysts design dashboards, reports, & forecasting models that help organizations monitor performance, predict outcomes, & comply with data governance standards. Their skills are in high demand across various industries, including healthcare, finance, retail, & government, where they play a crucial role in mitigating risks, optimizing operations, & driving innovation.

The **Data Analyst Microdegree Program** is designed to equip you with in-demand skills through hands-on, practical learning. Over the course of the program, you will **Master Data Fundamentals**, learn how to identify, store, & manage both relational and non-relational data in Microsoft Azure. **Analyze Data with Power BI** to prepare, clean, model, & visualize data, applying measures, filters, & dashboards for impactful reporting. **Explore Artificial Intelligence** for understanding machine learning, natural language processing, & computer vision, & how AI integrates with Azure. **Work with Microsoft Fabric & Databricks** to gain skills in end-to-end analytics, real-time intelligence, data pipelines, & Delta Lake tables. **Develop Responsible Data** practices for governance, compliance, ethics, & cost-management strategies for professional data work. **Build Practical Solutions** using Azure Machine Learning & Power BI to design training solutions, optimize models, & deploy data-driven applications.

Earn Globally Accepted Industry & Academia Recognized Credentials

- 6 Course Certificates issued by Microsoft and KAMK University
- Domain Professional Certificate issued by Microsoft and KAMK University
- Course skills qualification badges
- 9 ECTS credits transcript from KAMK University
- LinkedIn badge
- QR-verifiable Certificates for global authentication

Job Roles For Graduates

Data Analyst.	Turning data into actionable insights and reports
Business Intelligence Analyst.	Building dashboards and visualizations for decision-making
Data Specialist/	
Data Associate.	Managing and preparing large datasets
Reporting Analyst.	Developing automated reporting systems using Power BI
Junior Data Scientist.	Assisting in building and deploying machine learning models
Cloud Data Professional.	Working with Azure, Fabric, and Databricks for enterprise data solutions

Study Program

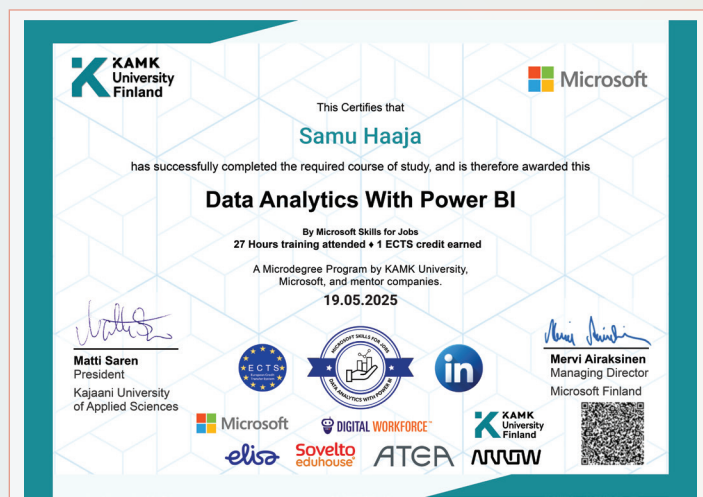
Certificate	Course	Online / Supervised	Mentorship-GTC	Online Assessments	ECTS Credits	Course Certificate
01	Exploring Microsoft Azure	54 Hours	04 Hours	Yes	02 Credits	Completion Certificate
02	Exploring Artificial Intelligence	54 Hours	04 Hours	Yes	02 Credits	Completion Certificate
03	Exploring Data And Analytics	27 Hours	04 Hours	Yes	01 Credit	Completion Certificate
04	Data Analytics with Power BI	27 Hours	04 Hours	Yes	01 Credit	Completion Certificate
05	Data Analytics with Azure	27 Hours	04 Hours	Yes	01 Credit	Completion Certificate
06	Data Analytics with Fabric	54 Hours	04 Hours	Yes	02 Credit	Completion Certificate
		243 Hours			09 Credits	

*Region-Specific

Students earn the Data Analyst 'Professional Certificate and Shareable Badge' after completing all 6 courses



6 Course Certificates



Professional Certificate





COURSE 1
Exploring Microsoft Azure

UNIT 01

INTRODUCTION TO AZURE

- 1. Basics of Azure
- 2. Physical Infrastructure
- 3. Management Infrastructure
- 4. Computing Service
- 5. Virtual Networking

UNIT 02

DATA, STORAGE AND SAFETY

- 1. Azure Storage
- 2. Storage Services
- 3. Data Migration
- 4. Authentication and Authorization
- 5. Conditional Access

UNIT 03

GOVERNANCE AND COST MANAGEMENT

- 1. Project Management in Azure
- 2. Managing with Azure Arc
- 3. Governance and Compliance
- 4. Cost Management
- 5. Summary



COURSE 2
Exploring Artificial Intelligence

UNIT 01

GETTING STARTED WITH AZURE AI

- 1. Fundamental Concepts of AI
- 2. Introduction to Machine Learning
- 3. Supervised Learning
- 4. Unsupervised Learning
- 5. Azure and AI

UNIT 02

AZURE AND COMPUTER VISION

- 1. Fundamental Concepts of Computer Vision
- 2. AI and Facial Recognition
- 3. Recognizing Characters with AI

UNIT 03

AZURE AND NATURAL LANGUAGE PROCESSING

- 1. Fundamental Concepts of NLP
- 2. Question Answering
- 3. Conversational Language Understanding
- 4. Azure and AI Speech

UNIT 04

AZURE AND GENERATIVE AI

- 1. Fundamentals of Generative AI
- 2. Azure OpenAI Services
- 3. AI and Copilots
- 4. Responsibility and Ethics

UNIT 05

AZURE AND DOCUMENT INTELLIGENCE

- 1. Fundamental Concepts of DI
- 2. Azure and Cognitive Search
- 3. Enriched Data and Query Design
- 4. Azure AI Search
- 5. Summary



COURSE 3
Exploring Data and Analytics

UNIT 01

FOUNDATIONAL DATA CONCEPTS

- 1. Identifying Data
- 2. Databases and Processing
- 3. Data Roles and Services

UNIT 02

RELATIONAL AND NON-RELATIONAL DATA

- 1. Exploring Relational Data
- 2. Relational Databases in Azure
- 3. Adopting Cloud Services
- 4. Exploring Non-relational Data
- 5. Fundamentals of Azure Cosmos DB

UNIT 03

DATA ANALYTICS IN AZURE

- 1. Large-scale Analytics
- 2. Real-time Analytics
- 3. Data Visualization
- 4. Summary

Microsoft Skills For Jobs

Data Analyst Microdegree Program 'Syllabus'



COURSE 4

Data Analytics with Power BI

UNIT 01

GETTING STARTED WITH DATA ANALYTICS

1. Discovering Data Analytics
2. Getting Familiar with Power BI
3. Preparing Data for Analytics
4. Preparing Data and Troubleshooting
5. Simplifying and Cleaning

UNIT 04

MANAGING WORKSPACES AND DATASETS

1. Managing Workspaces in Power BI
2. Managing Semantic Models
3. Creating Dashboards
4. Implementing Row-level Security
5. Summary

UNIT 02

MODELING DATA SECTIONS

1. Essential Data Structures
2. Defining Frameworks
3. Setting Up Semantic Models
4. Data Granularity and DAX
5. Understanding Measures
6. Optimizing Model Performance

UNIT 03

VISUALIZING DATA SECTIONS

1. Report Design Requirements
2. Designing Data Reports
3. Configuring Filters
4. Performing Analytics



COURSE 5

Data Analytics with Azure

UNIT 01

GETTING INTO MACHINE LEARNING

1. Exploring the World of Machine Learning
2. Designing Training Solutions
3. Designing Model Deployment

UNIT 04

OPTIMIZING AND DEPLOYING MODELS

1. Registering MLflow Models
2. Exploring Responsible AI-Deploying to a Managed Online-Endpoint
3. Deploying to a Batch Endpoint
4. Summary

UNIT 02

EXPLORING AND CONFIGURING AZURE MACHINE LEARNING

1. Introduction to Azure Machine Learning
2. Interacting with Workspaces
3. Ensuring Data Availability
4. Working with Compute Targets and Environments

UNIT 03

EXPERIMENTING AND OPTIMIZING MODELS

1. Defining the Best Classification Model
2. Tracking Model Training
3. Running Training Scripts
4. Fine-tuning with Hyperparameters
5. Automating with Pipelines



COURSE 6

Data Analytics with Fabric

UNIT 01

DATA ANALYTICS WITH FABRIC

1. Introduction to Microsoft Fabric
2. End-to-end Analytics and Lakehouses
3. Apache Spark and Microsoft Fabric
4. Working with Delta Lake Tables
5. Orchestrating Processes and Data Movement
6. Real-Time Intelligence in Microsoft Fabric
7. Getting into Data Science

UNIT 04

DATA SCIENCE AND MACHINE LEARNING

1. Exploring Data with Notebooks
2. Preprocessing Data
3. Working with Models in MLflow
4. Generating Batch Predictions

UNIT 02

IMPLEMENTING A DATA WAREHOUSE

1. Foundations of Data Warehouses
2. Loading Data into a Warehouse
3. Querying a Data Warehouse
4. Monitoring a Data Warehouse
5. Securing a Data Warehouse

UNIT 05

DATA ANALYTICS WITH DATABRICKS

1. Exploring Azure Databricks
2. Apache Spark and Databricks
3. Managing Data with Delta Lake
4. Data Pipelines with Delta Live Tables
5. Deploying Workloads with Databricks

UNIT 03

WORKING WITH SEMANTIC MODELS

1. Measures and Scalable Model Design
2. Optimizing Model Performance
3. Creating and Managing Assets
4. Enforcing Model Security

UNIT 06

ADMINISTRATION AND GOVERNANCE

1. Administering Fabric Environments
2. Securing Data Access
3. Governing Data with Purview
4. Summary

Eligibility

Eligibility Criteria	Details	ANALYST
English Language	A good command of the English language is required, as all course content, assignments, and communication are conducted in English.	
Prior Knowledge	Not required. Anyone can enroll.	
Recommended Background	Basic IT awareness is helpful but not mandatory.	
Learning Format	Online with mentorship classes, self-paced and browser based (no downloads).	
Assessment Method	Pass or fail assignments.	
Hardware with Internet Access	Laptop, Tablet or Smartphone.	
Study Program Duration	The Edukamu Learning Management System (LMS) remains accessible for 12 months to complete the Microdegree Study Program. On average, students finish their chosen Microdegree within 3–5 months, depending on the specific program selected.	

For inquiries and partnerships outside the EU, please contact:

Exclusive Authorised Academic and Training Partner



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