**Microsoft**

# Learning paths for in-demand jobs

Helping job seekers and the organizations supporting them successfully navigate the paths to in-demand roles in a more digital economy

# Table of contents
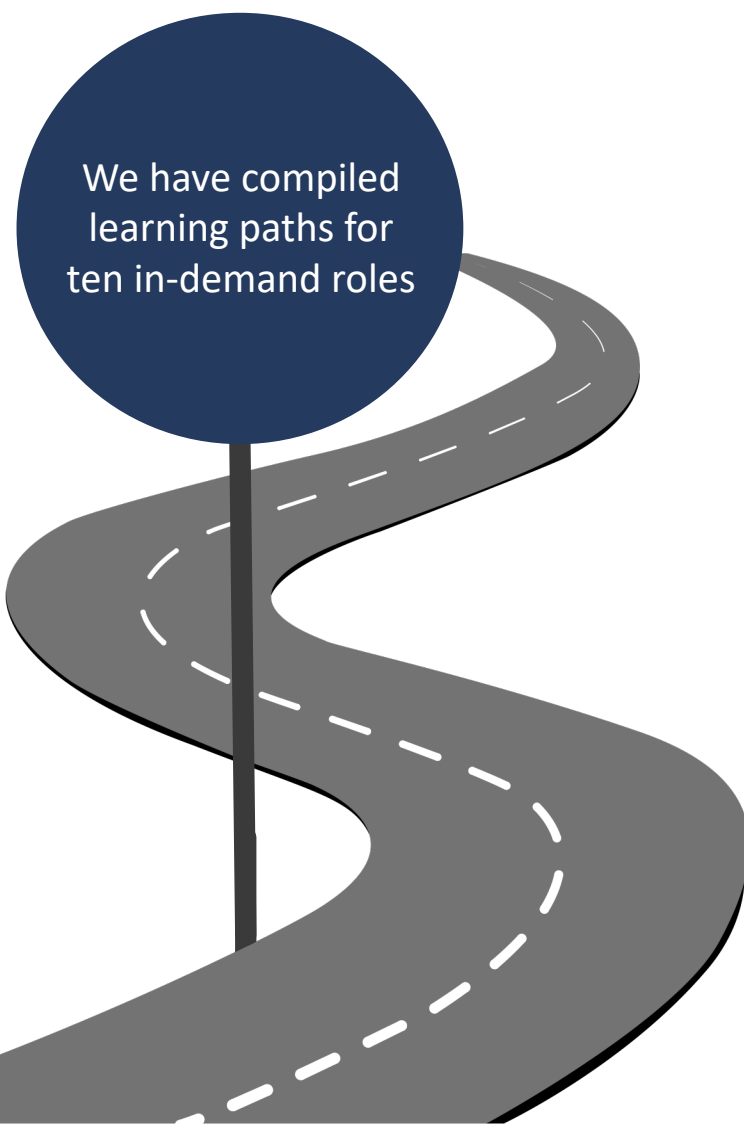
# Pursue learning paths for in-demand roles

We have compiled learning paths for ten in-demand roles

- Data from LinkedIn's Economic Graph and Microsoft Learn was used to understand key workforce trends, emerging skills gaps, in-demand technical and product skills, and the most in-demand jobs globally

- This helped to identify ten in-demand jobs globally that are relevant in today's economy and accessible to those seeking employment

- The learning paths cover a broad range of skills, from entry-level digital literacy to advanced product-based skilling for technical roles. These Role based learning paths provide opportunities for people—wherever they are starting from—to reskill and upskill for in-demand roles

# What will this document help me do?

**1**

**Map the learning paths to in-demand roles and track job seeker progress**

- While the job seeker resources are broadly available online, some people may benefit from additional support on their journey. This guide maps the learning pathways from entry level digital literacy to advanced product-based skilling for technical roles. Use it to navigate between LinkedIn Learning and Microsoft Learn content

- Identify where a learner is on their journey. Then, based on their skills, interests, and the job role needs of the region, work together to choose a role well-suited to them. This guide will help identify what skills are needed for job seekers to advance to the next step towards an in-demand role

- Use the arrows at the bottom of each page to help navigate next steps on the learning journey. See arrows and the color legend below

| Dark blue: Completed section of learning path | Light blue: Current section on learning path | Green: Up next on the learning path | Gray: Future section | Future section | Future section | Future section | Future section |

# What will this document help me do?

**2**

**Use this guide to identify where supplementary content is needed for learning paths or where it can complement existing nonprofit resources**

- Currently the content on LinkedIn Learning and Microsoft Learn is not available in all languages. This guide highlights the skills developed in each step so that nonprofits can customize the learning paths and supplement with their own, local language courses and content when they are not available from Microsoft or LinkedIn

- As nonprofits transition from in-person to virtual learning environments, they can use this learning content as part of their virtual training offerings, to supplement training they already offer, or to help instructors build their skills and confidence

- Additionally, it can help organizations as they build out their own learning course portfolios to show the progression of content and concepts needed to move job seekers from digital literacy to in-demand roles

# Where is your job seeker on their learning journey?

## Digital skills

Job seekers can start here to learn the fundamentals of using digital technologies. They will learn how to effectively use devices, software, and the internet to collaborate with others and discover, use, and create information

## Foundational skills

Job seekers will start here if they are looking to build on digital skills and learn how to use a computer comfortably while improving learning and productivity. They will discover the essential soft-skills that help people interact effectively with others

## Role based skills

Once job seekers feel confident in their digital and foundational skills and decides what role they would like to pursue, they can access courses on LinkedIn Learning to gain the role based skills for in-demand jobs
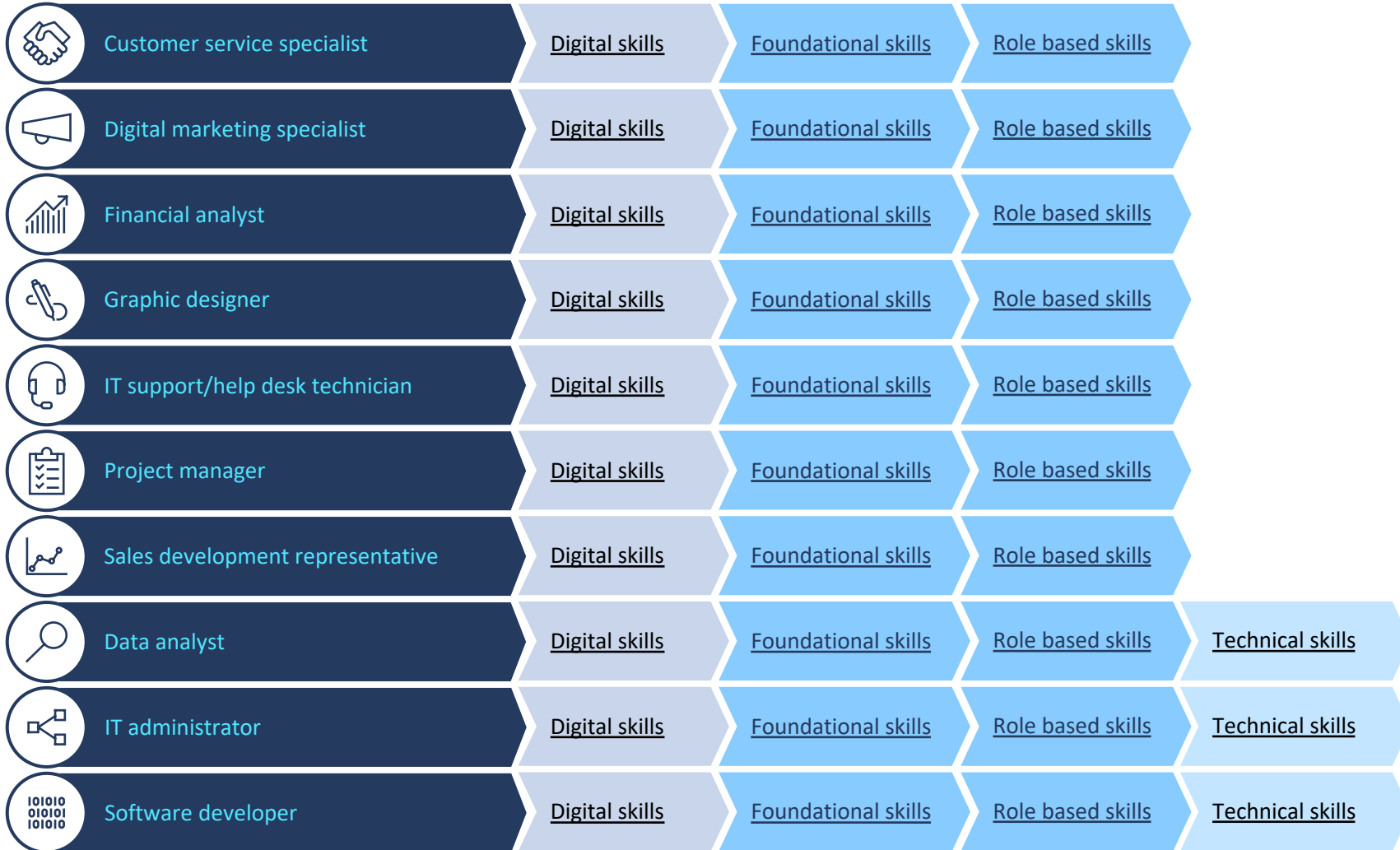
## Technical skills

Job seekers can go deeper on technical skills for three of the roles with Microsoft Learn modules. They will gain valuable and in-demand skills on widely used technologies while preparing for a role based Microsoft Certification

| If you want to pursue a role as a... | Follow this learning journey based on your current skills | | | |
| --- | --- | --- | --- | --- |
| Customer service specialist | Digital skills | Foundational skills | Role based skills | |
| Digital marketing specialist | Digital skills | Foundational skills | Role based skills | |
| Financial analyst | Digital skills | Foundational skills | Role based skills | |
| Graphic designer | Digital skills | Foundational skills | Role based skills | |
| IT support/help desk technician | Digital skills | Foundational skills | Role based skills | |
| Project manager | Digital skills | Foundational skills | Role based skills | |
| Sales development representative | Digital skills | Foundational skills | Role based skills | |
| Data analyst | Digital skills | Foundational skills | Role based skills | Technical skills |
| IT administrator | Digital skills | Foundational skills | Role based skills | Technical skills |
| Software developer | Digital skills | Foundational skills | Role based skills | Technical skills |

✓ Learn the basics of technology on Microsoft digital skills

✓ Gain foundational and role based skills for in-demand jobs and earn certificates of completion on LinkedIn Learning

✓ Advance technical skills on Microsoft Learn to prepare for certification

# Get started on the learning paths

# Digital skills

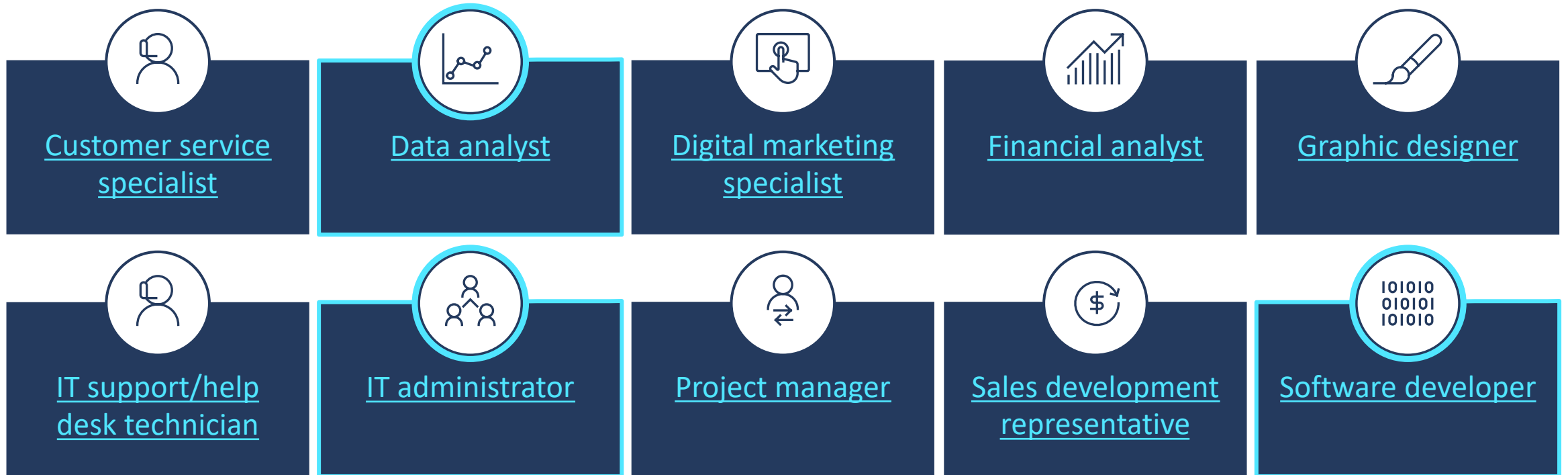| Skills | | Courses available | |
|---|---|---|---|
| Digital literacy (5 hours) | • Work with computers<br>• Access information online<br>• Communicate online<br>• Participate safely and responsibly online<br>• Create digital content<br>• Collaborate and manage content digitally | Microsoft digital literacy course | |

## Next steps on the journey:

Digital skills → Next: Foundational skills → Role selection → Learn about role → Role based skills → Technical skills → Certify skills → Job seeker resources

# Foundational skills

| | Skills | | Courses available | |
|---|---|---|---|---|
| **Digital fluency & productivity**<br>(19 hours) | • Windows 10<br>• Office 365<br>• Microsoft Teams & SharePoint<br>• Zoom/WebEx<br>• Remote work foundations | | [Digital transformation in practice: Virtual collaboration tools](#) | |
| **Critical soft skills**<br>(10 hours) | • Developing your emotional intelligence<br>• Critical thinking for better judgment and decision-making<br>• Persuading others | | [Master in-demand professional soft skills](#) | |

## Next steps on the journey:

Digital skills → **Foundational skills** → **Next: role selection** → Learn about role → Role based skills → Technical skills → Certify skills → Job seeker resources

# Role based knowledge and skills

# Continue deeper, technical skilling on Microsoft Learn

Data analyst

IT administrator

Software developer

After completing the role based skills on LinkedIn Learning, job seekers can go deeper on technical skills for three roles with Microsoft Learn modules
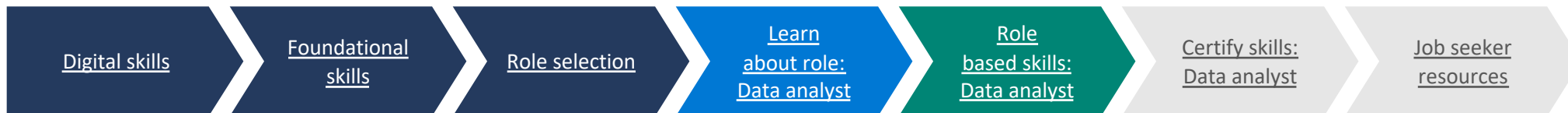
Digital skills | Foundational Skills | Role selection | Next: learn about role | Role based skills | Technical skills | Certify skills | Job seeker resources

# Data analyst

## Role description

These skilled professionals are trained in mathematics, statistics, and computer science, which allow them to take on many different roles — such as operations analyst, financial analyst, and marketing analyst. With their unique skill sets, data analysts make sense of numbers so that organizations can make solid decisions about pricing, scheduling, operations, and much more

## Top in-demand skills for Data analyst

DATA SCIENCE PYTHON EXTRACTION ORACLE PROJECT
VULNERABILITY TRANSFORMATION AND MANAGEMENT
ASSESSMENT SKILL SQL LOADING (ETL) BIG DATA NETWORK
DATA ANALYSIS DATA ANALYST LINUX SECURITY
INFORMATION DATA ANALYST LINUX SECURITY
ASSURANCE JAVA SCHEDULING INFORMATION SYSTEMS
CRYPTOGRAPHY RISK ASSESSMENT APACHE HADOOP SOFTWARE DEVELOPMENT
INFORMATION SECURITY CUSTOMER SERVICE UNIX
SECURITY OPERATIONS DATA MANAGEMENT DATA WAREHOUSING

## Next steps on your journey:

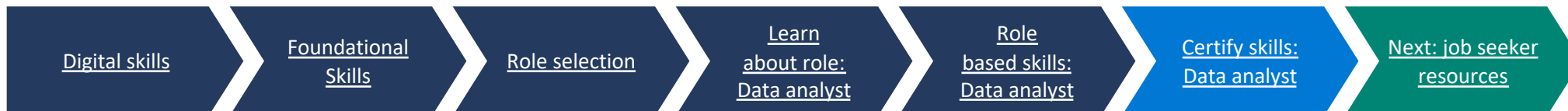| Digital skills | Foundational skills | Role selection | Learn about role: Data analyst | Role based skills: Data analyst | Certify skills: Data analyst | Job seeker resources |

# Data analyst
## Role based skills

| Skills | | Courses available | |
|---|---|---|---|
| Role based skills (43 hours) | Data analytics, data analysis, Excel, statistical data analysis, data visualization, business analytics, Power BI, performance dashboards, Tableau | [Become a Data analyst](#) | |
| | Project management, business ethics, requirements management, budget management, communication, risk management, risk analysis, stakeholder management, Microsoft Project | [Become a Project manager](#) | |
| | Databases, database development, database queries, SQL | [Learning SQL programming](#) | |
| | Hands-on guided learning | [GitHub Learning Lab](#) | |

# Data analyst
## Technical skills

Microsoft Technology Area: Power Platform

| | Skills | | Courses available |
|---|---|---|---|
| Learn Fundamental skills (8 hours) | CRM, ERP, Power BI | | Data analyst fundamentals |
| Certify skills | Microsoft Power Platform Fundamentals | | |
| Learn Fundamental skills (8 hours) | SQL, Azure SQL database, SQL Server, Azure Data Factory, Power BI | | Data analyst fundamentals |
| Certify skills | Azure Data Fundamentals | | |
| Develop deeper skills (13 hours) | Power BI, data analysis, Common Data Service, Data Management, Dynamics 365 Customer Insights | | Deep data analyst skills |
| Certify skills | Data Analyst Associate | | |

Digital skills → Foundational Skills → Role selection → Learn about role: Data analyst → Role based skills: Data analyst → Certify skills: Data analyst → Next: job seeker resources

# IT administrator

## Role description

These technical experts perform day-to-day maintenance and repairs, including software and computer installations and upgrades, routine automation, security maintenance, troubleshooting, training, and technical support for all users and projects of the organization

## Top in-demand skills for IT administrator

SCHEDULING REPAIR CISCO
INFORMATION SYSTEMS NETWORK ADMINISTRATION
ORACLE IT TELECOMMUNICATIONS WIDE AREA NETWORK (WAN)
DATABASE ADMINISTRATION PROJECT MANAGEMENT PYTHON SQL
UNIX NETWORK TROUBLESHOOTING ADMINISTRATOR DATABASE ADMINISTRATION LINUX
SYSTEM / NETWORK CONFIGURATION CUSTOMER SERVICE SYSTEM WINDOWS SERVER
ADMINISTRATION ROUTERS
VMWARE HARDWARE AND SOFTWARE INSTALLATION
MICROSOFT ACTIVE DIRECTORY
NETWORK ENGINEERING

## Next steps on your journey:

Digital skills → Foundational skills → Role selection → Learn about role: IT administrator → Role based skills: IT administrator → Technical skills: IT administrator → Certify skills → Job seeker resources

# IT administrator

## Role based skills

| Skills | | Courses available | |
|---|---|---|---|
| **Role based skills (53 hours)** | Network administration, computer networking | [Prepare for the CompTIA network+ certification](#) | |
| | Project management, business ethics, requirements management, budget management, communication, risk management, risk analysis, stakeholder management, Microsoft Project | [Become a Project manager](#) | |
| | Databases, database development, database queries, SQL | [Learning SQL programming](#) | |
| | Hands-on guided learning | [GitHub Learning Lab](#) | |

Digital skills → Foundational skills → Role selection → Learn about role: IT administrator → Role based skills: IT administrator → Technical skills: IT administrator → Certify skills → Job seeker resources

# IT administrator certification journey options

## Microsoft 365

Microsoft 365 Teamwork Administrators configure, deploy, and manage Office 365 workloads that focus on efficient and effective collaboration, such as SharePoint (online, on-premises, and hybrid), OneDrive, and Microsoft Teams

## Microsoft Azure

Responsibilities for this role include implementing, managing, and monitoring identity, governance, storage, compute, and virtual networks in a cloud environment, plus provision, size, monitor, and adjust resources, when needed

An Azure Administrator often serves as part of a larger team dedicated to implementing your organization's cloud infrastructure

## Security

Azure Security Engineers implement security controls and threat protection; manage identity and access; and protect data, applications, and networks in cloud and hybrid environments as part of end-to-end infrastructure

Digital skills > Foundational skills > Role selection > Learn about role: IT administrator > Role based skills: IT administrator > Technical skills: IT administrator > Next: Certify skills > Job seeker resources

# IT administrator

## Technical skills

Microsoft Technology Area: Microsoft 365

| Skills | | Courses available | |
|---|---|---|---|
| Learn fundamental skills (4 hours) | Microsoft 365 subscription, Microsoft 365 services, Microsoft 365 teamwork toolkit, Microsoft 365 Apps, Microsoft 365 endpoint management, Microsoft 365 security, Microsoft 365 compliance tools, cloud deployment model | IT administrator fundamentals | |
| Certify skills | | Microsoft 365 Fundamentals | |
| Develop deeper skills (6 hours) | SharePoint, Microsoft 365 Groups, Teams management, Skype for Business, Teams upgrade, hybrid connectivity | Develop deep IT administrator skills | |
| Certify skills | | Microsoft 365 Teams Administrator Associate | |

# IT administrator

## Technical skills

Microsoft Technology Area: Microsoft Azure

| Skills | | Courses available | |
|---|---|---|---|
| **Learn fundamental skills (4 hours)** | Azure, Core Cloud Services, Apply and monitor infrastructure standards, Azure Resource Manager, Azure Cost Management and Azure Advisor | IT administrator fundamentals | |
| **Certify skills** | | Azure Fundamentals | |
| **Develop deeper skills (7 hours)** | Monitoring, incident response, logging, provisioning, ARM, deployment, scaling, architecture, HPC, disaster recovery, backup, autoscaling, storage, data management, blob storage, access management, VPN, network security, network architecture, load balancing ,threat management, policy configuration, RBAC, threat modeling, firewalls, security baseline, incident response, diagnostic logging, Azure policy, virtual machines, CLI, PowerShell, Active Directory, Docker, Security Center, OpenID Connect, Multi-factor authentication | Deep IT administrator skills | |
| **Certify skills** | | Azure Administrator Associate | |

Digital skills  >  Foundational skills  >  Role selection  >  Learn about role: IT administrator  >  Role based skills: IT administrator  >  Technical skills: IT administrator  >  Certify skills: Azure  >  Next: job seeker resources

# IT administrator

## Technical skills

Microsoft Technology Area: Security

| Skills | | Courses available | |
|---|---|---|---|
| **Learn fundamental skills (4 hours)** | Microsoft 365 subscription, Microsoft 365 services, Microsoft 365 teamwork toolkit, Microsoft 365 Apps, Microsoft 365 endpoint management, Microsoft 365 security, Microsoft 365 compliance tools, cloud deployment model | IT administrator fundamentals | |
| **Certify skills** | | Microsoft 365 Fundamentals | |
| **Develop deeper skills (7 hours)** | Threat modeling, data flow diagrams, security controls, active directory, threat protection, security strategy principles, information protection, prevent data loss, monitor and analyze sensitive data, Security Center, protect mail, securing Windows 10 endpoints | Deep IT administrator skills | |
| **Certify skills** | | Microsoft 365 Security Administrator | |

# Software developer

## Role description

Software engineers work in retail, healthcare, research and development, technology, and dozens of other industries. They design, develop, and implement software from the ground up, allowing organizations to keep
step with the ever-changing digital landscape

## Top in-demand skills for Software Developer

ORACLE LINUX JQUERY SQL PYTHON
PROJECT MANAGEMENT WEB DEVELOPMENT
ANGULAR JS AGILE DEVELOPMENT DEVOPS .NET SOFTWARE
JAVA SOFTWARE ENGINEERING
SCRIPT
JAVA DEVELOPER DEBUGGING
UNIT SCRUM
MICROSOFT C# GIT HTML 5 TESTING C++
OBJECT-ORIENTED ANALYSIS AND DESIGN(OOAD)
WEB APPLICATION SOFTWARE CUSTOMER SERVICE
DEVELOPMENT DEVELOPMENT

## Next steps on your journey:

| Digital skills | Foundational skills | Role selection | Learn about role: Software developer | Role based skills: Software developer | Technical skills: Software developer | Certify skills | Job seeker resources |

# Software developer

## Role based skills

| | Skills | Courses available |
|---|---|---|
| **Role based skills (45 hours)** | Python**,** programming, JavaScript, database development, database administration, database design, SQL, web development, full stack development, front end development, HTML, web design, CSS, web application security | [Become a Software developer](#) |
| | Project management, business ethics, requirements management, budget management, communication, risk management, risk analysis, stakeholder management, Microsoft Project | [Become a Project manager](#) |
| | Databases, database development, database queries, SQL | [Learning SQL programming](#) |
| | Hands-on guided learning | [GitHub Learning Lab](#) |

[Digital skills](#) → [Foundational skills](#) → [Role selection](#) → [Learn about role: Software developer](#) → [Role based skills: Software developer](#) → [Technical skills: Software developer](#) → Certify skills → [Job seeker resources](#)

# Software developer certification journey options

| Microsoft 365 | Azure | Security | Power Platform |
|---|---|---|---|
| Microsoft 365 Developers design, build, test, and maintain applications and solutions that are optimized for the productivity and collaboration needs of organizations using the Microsoft 365 platform | Azure Developers partner with cloud solution architects, cloud DBAs, cloud administrators, and clients to implement solutions | Azure Security Engineers implement security controls and threat protection; manage identity and access; and protect data, applications, and networks in cloud and hybrid environments as part of end-to-end infrastructure | The app maker uses the maker tools of Power Platform to solve business problems; create business processes, structure digital collection of information, and automates business processes |

Digital skills → Foundational skills → Role selection → Learn about role: Software developer → Role based skills: Software developer → Technical skills: Software developer → Certify skills → Job seeker resources

# Software developer

## Technical skills

Microsoft Technology Area: Microsoft 365

| Skills | | Courses available |
|---|---|---|
| **Learn fundamental skills (4 hours)** | Subscription management, Microsoft 365 services, Microsoft 365 teamwork toolkit, Microsoft 365 Apps, endpoint management, Microsoft 365 security, compliance tools, cloud deployment model | Software developer fundamentals |
| **Certify skills** | | Microsoft 365 Fundamentals |
| **Develop deeper skills (22 hours)** | HTML, CSS, and JavaScript, Visual Studio Code, C#, Office ad-ins, SharePoint framework , Microsoft Graph, Active Directory, Identity management | Deep software developer skills |
| **Certify skills** | | Microsoft 365 Developer Associate |

Digital skills > Foundational skills > Role selection > Learn about role: Software developer > Role based skills: Software developer > Technical skills: Software developer > Certify skills: Microsoft 365 > Next: Job seeker resources

# Software developer

## Technical skills

Microsoft Technology Area: Power Platform

| Skills | | Courses available | |
|---|---|---|---|
| Learn fundamental skills (4 hours) | CRM, ERP, Power BI | [Software developer fundamentals](#) | |
| Certify skills | | Microsoft Power Platform Fundamentals | |
| Develop deeper skills (35 hours) | Data models, visualizations, Azure Data Lake, Common Data Service, resource mapping, security, api development | [Deep software development skills](#) | |
| Certify skills | | Microsoft Power Platform App Maker | |

# Software developer

## Technical skills

Microsoft Technology Area: Azure

| Skills | | Courses available | |
|---|---|---|---|
| Learn fundamental skills (9 hours) | Azure, Core Cloud Services, Apply and monitor infrastructure standards, Azure Resource Manager, Azure Cost Management, Azure Advisor | Software developer fundamentals | |
| Certify skills | | Azure Fundamentals | |
| Develop deeper skills (62 hours) | Cloud computing, serverless, functions, Visual Studio, webhooks, SignalR, messaging, event hubs, service bus, queues, SQL, PostgreSQL, data, storage MEAN, RDP, virtual machines, PowerShell, resource manager, web apps, App Service, VS Code, Databricks, Security Center, Key Vault, SQL Database, Key Vault, RBAC, Databricks, SQL Data Warehouse, data factory, data transformation, Cosmos DB, stored procedures, Gremlin API, NoSQL Azure Notebook, Python, Keras | Deep software developer skills | |
| Certify skills | | Azure Developer Associate | |

Digital skills  >  Foundational skills  >  Role selection  >  Learn about role: Software developer  >  Role based skills: Software developer  >  Technical skills: Software developer  >  Certify skills: Azure  >  Next: Job seeker resources

# Software developer

## Technical skills

| Skills | | Courses available | |
|---|---|---|---|
| **Learn fundamental skills (9 hours)** | Core cloud services, monitor infrastructure standards, Azure Resource Manager, Azure Cost Management, Azure Advisor | Software developer fundamentals | |
| **Certify skills** | | Azure Fundamentals | |
| **Develop deeper skills (47 hours)** | Threat modeling, data flow diagrams, security controls, API management, Azure Active Directory, key vault, SQL database, architect migration , disaster recovery, network security, Cosmos DB, Synapse Analytics, SQL Database, virtual machine, identity management, multi-factor authentication, Azure Key Vault, governance, RBAC, virtual machines, management, monitoring, C# | Deep software developer skills | |
| **Certify skills** | | Azure Security Engineer Associate | |

# Job seeker info

## Critical soft skills

- Developing your emotional intelligence
- Critical thinking for better judgment and decision-making
- Persuading others

## Job seeker training

- Finding a job
- Recession-proof career strategies
- Writing a resume
- Video interview tips

## Search for jobs

- Using your network
- Stand out with your LinkedIn profile
- Set custom alerts

Digital skills → Foundational skills → Role selection → Learn about role → Role based skills → Technical skills → Certify skills → Job seeker resources

# Primary language offerings

| | English | French , German , Spanish |
|---|---|---|
| **LinkedIn content available** | • Role based training for top 10 in-demand roles | |
| **Microsoft Learn offerings** | • Technical training available for software developer, IT administrator, and data analyst roles<br>• Certification exams for software developer, IT administrator, and data analyst roles | |
| **GitHub** | • Learning Lab to practice technical skills hands-on | |

# Additional language offerings

| | Italian, Portuguese | Japanese | Korean, Chinese (simplified) | Chinese (traditional), Dutch, Swedish |
|---|---|---|---|---|
| Microsoft Learn | Technical training available for software developer, IT administrator, and data analyst roles | | | |
| Microsoft Certification Exams | • Translation for all 13 exams in progress | • Microsoft Azure Fundamentals<br>• Microsoft Azure Security Technologies<br>• Microsoft 365 Security Administration<br>• Microsoft 365 Fundamentals | • Microsoft Azure Fundamentals<br>• Microsoft Azure Security Technologies | |