



#### A JOINT PROGRAM BY KAMK UNIVERSITY AND MICROSOFT

WITH EUROPEAN HIGHER EDUCATION TRANSFER CREDITS (ECTS)



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

#### IN PARTNERSHIP WITH GLOBAL MENTOR COMPANIES

MICORSOFT SKILLS FOR JOBS MICRODEGREE PROGRAMS BROUGHT TO YOU BY



















#### **BROUGHT TO YOU BY**

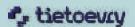




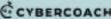
#### **GLOBAL MENTOR PARTNERS**







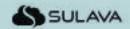














#### **EXCLUSIVE REPRESENTATIVE AND AUTHORIZED BUSINESS PARTNER**

Middle East, Africa, and South Asia



UAE . USA . Finland . Sweden . Denmark . Saudi Arabia . Qatar . Pakistan



#### **WHY FINLAND**

The Finnish education system has acheived
Worldwide acclaim and recognition for its
commitment to lifelong learning. This commitment
has placed Finland consistently at the forefront of
prestigious Global Educational rankings. Beyond
attracting thousands of foreign students each year,
Finland's profound commitment to education has lead
to an expansion of English-language degree programs
offered by Finnish universities.

Finland was ranked third in the 2021 Best
Countries for Education. This perception
based global survey used a compilation of scores
from three equally weighted country attributes:
the presence of a well-developed public education
system, the desirability of attending university in
the country, and the provision of top-quality
education in the country

...Learning should be something that we do all the time, and we should have the possibility to engage in it all the time, no matter if we are working or outside working life or studying."

-MINISTER OF EDUCATION, LI ANDERSSON





# ICT EDUCATION IN FINLAND

#### FINLAND ICT ECOSYSTEM

Finland has one of the world's most advanced and expansive applications of digital technology in Education, spanning from primary schools to universities. This consists of both formal and extracurricular learning facilitated through technology.

In 2022, amongst the EU, Finland has one of **the highest percentage of ICT specialists in the labour force** at 7.6% of total employment.

**Technology developed at Finnish universities are world-renowned,** with Finland's KAMK University in Finland playing a substantial regional role in research, development, innovation work, and service provision





The Finnish Government believes that digitization and openness will renew teaching, learning, research, and innovation activities. In pursuit of this vision, it has established a diverse array of initiatives to support this commitment.



The Finnish Government provides funding for Finland's UN Technology and innovation Lab (UNTIL), a strategic initiative crafted to unite UN personnel, research, educational institutions, and businesses in collaborative endeavors.



In the 2022 budget, the Finnish Government allocated 2.5 Billion Euros for R&D endeavors. A significant portion of this allocation is channeled towards universities through a variety of initiatives, including Allied ICT Finland, fostering innovation, and advancing ICT.

# KAMK UNIVERSITY

### FINLAND'S MOST PROACTIVE UNIVERSITY OF APPLIED SCIENCE

#### KAMK UNIVERSITY

KAMK University is a **proactive**, **dynamic** and **globally-engaged international university**, characterized by a robust regional and national presence. Nestled in the captivating natural landscapes of the Kainuu region, the university fosters a vibrant international learning and development community on its dedicated campus

KAMK University has **consistently earned top rankings** in the Ministry of Education and Culture's
outcome barometers. Notably, the quality of
teaching and counselling at KAMK University has
been recognized as the **finest in Finland for several consecutive years**. Furthermore, the
university has been awarded a prestigious quality
label by the Finnish Education Evaluation Centre
(FINEEC), and this label remains valid until the
spring of 2027

At KAMK University, studies offer a **pragmatic**, **work-oriented approach** that serves as a compelling alternative to traditional university education. The curriculum offers students an exceptional blend of hands-on practical skills and a strong foundation in theoretical knowledge.

KAMK University hosts a **diverse community** of international students annually, while also facilitating the educational journey's of Finnish students abroad. In its commitment to global engagement, the University has cultivated partnerships with universities in over 50 Countries, with each of its school fostering its unique collaborative network of international institutions.



#### **UNIVERSITY:**

Established in 1992, 3300 Finnish and international students. Ranked in Top 3 Finnish universities of Applied Sciences. English Language Education.



#### RESEARCH & INNOVATION:

100+ Ongoing research, development and innovation projects. On-campus super computers - LUMI AND BULL



#### **STUDENTS SUCCESS:**

Employment rate for graduating students is 98%. 160+ new companies founded by students in last 10 years.



#### **FACULTY AND PARTNERS:**

Faculty & staff of over 300 and 100+ international partners. Global academic partnerships for Virtual Education.



#### SCHOOL OF TECHNOLOGY AND INFORMATION SYSTEMS

The School of Technology at KAMK University includes information systems, mechanical engineering, mining engineering, and construction & civil engineering. KAMK University is a **nationally acclaimed R&D partner** which is actively collaborating with the industry and is also very active in international cooperation.

The Information Systems department offers a bachelor's degree in **Business Information**. This program aims to cultivate experts in information systems development, planning, programming, maintenance, marketing, and training. The program offers two specializations, **game development and data center management**.

The Information Systems department also hosts the ICT Engineering Program, providing students the opportunity to specialize in data management, processing, and the development of artificial intelligence solutions. Throughout their studies, students acquire expertise in the entire process, from data collection and processing to the implementation of artificial intelligence services.





- BSc Business Information Technology
- BSc Information and Communication
- Technology
- MSc Business Information Technology
- MSc Technology Management

# KAMK UNIVERSITY THE BEST GAMING EDUCATION IN FINLAND



KAMK University offers comprehensive training that covers various aspects of game development. This enables students to specialize in game programming, game graphics, or game production.

#### **ON-CAMPUS ICT FACILITIES**

- LUMI supercomputer
- BULL supercomputer
- Smart systems laboratory
- Data center
- Data center laboratory
- Game laboratories
- VR/AR labs and environment
- (CSE and VIS)
- Robotics laboratory
- Linux learning center

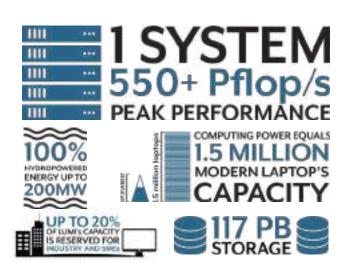
The objective of KAMK's game education is to provide students with specialized skills in game development, ensuring their success in the industry. KAMK University students have earned recognition on national and international stages through competitions and events. Particularly noteworthy is KAMK University's exclusive status as the Sony PlayStation First Academic Partner in Finland, providing game degree students with a unique opportunity to develop games on the PlayStation platform as part of their studies.

# KAMK UNIVERSITY ON-CAMPUS SUPERCOMPUTERS

#### **LUMI SUPERCOMPUTER**

The LUMI (Large Unified Modern Infrastructure) is ranked as the **fastest supercomputer in Europe** and stands among **the top 5 most powerful supercomputers** globally. It also holds the reputation as one of the **most environmentally efficient supercomputers** in the world, utilizing 100% hydroelectric energy and repurposing the heat generated to provide heating to Kajaani City.





#### **BULL CLUSTER SUPERCOMPUTER**

- 72 Nvidia Tesla K40 GPGPU
- 88 Intel 7120X Xeon Phi
- · 2656 GB memory
- Peak 240Tflops





#### **LEARNING CONCEPTS**

KAMK University **emphasizes cognitive learning**, empowering students to take charge of their education by actively selecting, interpreting, and constructing **knowledge through reflection and internal thought processes**.

#### **KAMK UNIVERSITY WITH PARTNERS AND MENTORS:**

- Creates personalized study plans from higher education materials, quality-checked by partners and mentors.
- Allocates ECTS credits to support student study plans.
- Collaborates on competency exams and grading.
- Ensures content quality and student proficiency.

#### THE STUDENT:

- Achieves operational efficiency, measured by financial & qualitative metrics, and enjoys flexibility.
- Aligns study plans with job market needs and selected degrees.
- Blends quality material from KAMK, partners, and mentors in study plans.
- Embraces remote, independent, multi-modal learning.
- Gains course credits recognized by European Credit Transfer and Accumulation System (ECTS) upon program completion

#### **KAMK UNIVERSITY HIGHER EDUCATION MODEL:**

The KAMK higher education model combines the best practices in ready-made elements, with high quality and cost efficiency.

#### For the international students, KAMK offers 3 progressive study programs:

- 1. Microsoft Skills for Jobs Microdegree Programs
- 2. In-Country Short Courses in ICT Skills (Under planning for Pakistan)
- 3. Embarking on or continuing degree programs in Finland or EU countries.

The three study programs are both independent and interconnected, starting with the Microsoft Skills for Jobs Microdegree Programs

# MICROSOFT SKILLS FOR JOBS MICRODEGREE PROGRAMS ARE UNIQUE

#### UNLOCK A WORLD OF JOB OPPORTUNITIES IN TECHNOLOGY

Annually, countless job opportunities emerge in the technology sector, offering numerous paths for aspiring professionals. The **Microdegree Programs** serve as your gateway to becoming a **proficient technology expert** and, most importantly, **advancing your career**.

These Microdegree Programs are proudly presented by the KAMK University, in collaboration with **industry leaders** like Microsoft and global mentor companies specializing in Information Technology (IT). The curriculum, course program, ECTS credits, and certificates hold **global recognition** within both the **IT industry and the academia**, strengthening your qualifications and credentials for lucrative job opportunities and higher education prospects.

These programs are designed for online and independent study, supported by mentorship hours. Each Microdegree Program certificate **comprises of comprehensive courses**, complete with ECTS credits and is assessed through a pass/fail grading system. Successful course completion requires dedication, including fulfilling all assignments and passing the online exam.



Upon completing each course, you will receive a Course **Completion Certificate** and a shareable badge, highlighting your newly acquired skills. Upon successfully finishing all the Microdegree Program courses, you will earn the prestigious **Domain-Specific Professional Certificate** and a shareable badge, distinguishing you in the competitive technology landscape.

Each year, 3-4 globally sought-after Microdegree programs are introduced.

The European Credit Transfer and Accumulation System (ECTS) serves as a tool within the European Union Higher Education Area, enhancing the transparency of studies and courses. It helps students move between countries and ensures the recognition of academic qualifications and study periods abroad. ECTS enables credits earned at one higher education institution to contribute to a qualification pursued at another institution. ECTS credits represent learning based on defined learning outcomes and their associated workload. It is a central tool in the Bologna Process, which aims to make national education systems more comparable internationally. ECTS has been adopted by most of the countries in the European Union Higher Education Area as the national credit system and is increasingly used in other regions.



# THE MICRODEGREE PROGRAMS HAVE BEEN DEVELOPED WITH THE FOLLOWING GOALS FOR THE STUDENTS

- Validation of Skills and Knowledge
- Securing a Competitive Advantage in the
   Job Market Facilitating Career Advancement
- Increase Earning Potential
- Pathway to Higher Education in Europe

#### THESE PROGRAMS ARE DESIGNED FOR

- Computer Science and Engineering graduates aspiring to secure rewarding IT job opportunities
- >>> Arts and science graduates aiming for careers in the IT industry.
- >>> Freelance IT professionals wanting to boost their income potential.
- >>> IT professionals seeking a pathway to advance in their careers.
- >>> Students planning to start or continue their higher education in European universities.
- Individuals with a desire to gain cutting-edge technology skills and knowledge

#### **MICRODEGREE PROGRAMS ROADMAP 2024**

Microdegree Program #1

Cloud and Cybersecurity

KAMK University - Microsoft Partnership Program with Mentor Companies

12 ECTS CREDITS

Microdegree Program #2

MS Power Platform

KAMK University - Microsoft partnership Program with Mentor Companies

**8 ECTS CREDITS** 

Microdegree Program #3

Dev Al, Al Empowered Azure Cloud Developer

KAMK University - Microsoft Partnership Program with Mentor Companies

12 ECTS CREDITS

# BENEFITS CLOUD AND CYBERSECURITY MICRODEGREE PROGRAM



#### STUDY PROGRAM

The Cloud and Cybersecurity study program course content brought to you by Microsoft Skills for Jobs, KAMK University and mentor companies covers a diverse set of concepts and technologies that prepare you well beyond the general industry certifications.



#### **ECTS CREDITS**

The Cloud and Cybersecurity study program offers 12 ECTS credits, these are recognized as transferable credits within European Union universities. The ECTS system has been widely adopted throughout the Higher Education Area in the majority of European Union countries, serving as the national credit system.



#### **CERTIFICATES AND BADGES**

Attain 6 Course Completion certificates and the prestigious Cloud and Cybersecurity Microdegree Certificate from Microsoft, KAMK University, and Mentor companies. Upon completion of each course, students' LinkedIn profiles will be automatically updated with a course completion badge, comprehensive course details, earned ECTS credits, completion date, and the issuing authority for online seamless verification.



#### **ONLINE VERIFICATION**

For employers and universities, the certificates include a QR code with both the student's personal information and the details of the earned certificates. This ensures easy verification and establishing the credibility of the certificates. Additionally, the LinkedIn badges provide a seamless online verification feature.



#### **INTERNATIONAL JOBS**

Individuals who have earned Microdegree
Programs certificates become a part of a
database accessible to mentor companies and
promoted to international employer companies
in the USA, EU countries, and GCC countries for
full-time positions, remote work opportunities,
and project-based remote work.



#### **JOBS IN PAKISTAN**

A database of individuals holding Microdegree Programs certificates will be shared with Pakistan's leading headhunting firms and employment agencies. This initiative seeks to link qualified individuals with premium job opportunities in Pakistan



#### STUDY ABROAD

Prospective students looking to begin or advance their higher education in EU universities can take advantage of the transferability of ECTS credits earned, with these credits contributing to the total study program credits.

Under usual circumstances, international students must meet specific admission requirements, including providing equivalent academic certificates, demonstrating proficiency in the English language, and completing the UAS entrance exam. However, students who have accumulated 60 ECTS credits through the ICT Microdegree Certification Programs can have the International UAS entrance exam waived. This credit transfer streamlines the admission process and enables students to save up to one year in their bachelor's degree program.

# THE FUTURE IS CLOUD AND CYBERSECURITY



The global cloud computing market size is expected to grow from USD 580 billion in 2023 to USD 1.24 trillion by 2028, at a CAGR (Compound annual growth rate) of 16.40% during the forecast period (2023-2028).

**Source: Mordor Intelligence** 



Cloud and cybersecurity skills are among the top skills employers are seeking in IT professionals. Cloud computing-related jobs have a growth rate of 30% year over year, making it one of the fastest growing jobs in the tech industry.

**Source: LinkedIn Emerging Jobs Reports** 



The cybersecurity workforce has reached an all-time high, with an estimated 4.7 million professionals, but there's still a global shortage of 3.4 million workers in this field, according to the 2022 (ISC)2 Cybersecurity Workforce Study.

**Source: Fortune Education** 



It is clear that cloud computing and cybersecurity are two areas of huge growth opportunities for workers looking for a way to future-proof their career or make an exciting pivot.

**Source: Finextra** 

# CLOUD AND CYBERSECURITY MICRODEGREE PROGRAM

# WELCOME TO THE CLOUD AND CYBERSECURITY MICRODEGREE PROGRAM

This program is brought to you by **KAMK University, Microsoft Skills for Jobs, and global mentor companies.** After completing the program, you will gain essential knowledge in cloud services, cybersecurity, and Microsoft Azure, the leading cloud platform driving growth and facilitating efficient, secure workflows in countless companies around the world

The Cloud and Cybersecurity Microdegree study program comprises six courses, each with study units, and a total of 12 ECTS credits. Upon completing each course with online assignments, you will be granted course completion certificate and sharable badge, allowing you to showcase your newly acquired skills. Upon successfully completing all six courses in the program and an online exam, you will achieve the esteemed Cloud and Cybersecurity Professional Certificate and a sharable badge, distinguishing you in both the competitive job market and academia.



The scope of the study program is a total of six courses with 12 European Study Credits (12 ECTS).

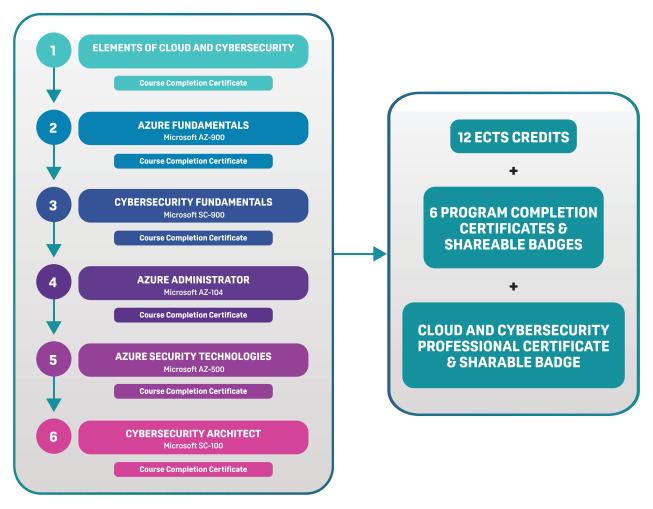
One study credit equals 27 hours of independent study, and the students can complete the courses at their own pace on the KAMK University online study platform, Edukamu. Edukamu works on computers, smartphones, and tablets. No downloads are needed, and you are ready to start immediately.

# STUDY PROGRAM CLOUD AND CYBERSECURITY

#### **STUDY PROGRAM**

Certificate	Course	Online Self-Study	In-Class Mentorship	Online Exams	ECTS Credits	Course Certificate
1	Elements of Cloud & Cybersecurity	54 Hours	4 Hours	YES	2 Credits	Completion Certificate
2	Azure Fundamentals	54 Hours	4 Hours	YES	2 Credits	Completion Certificate
3	Cybersecurity Fundamentals	54 Hours	4 Hours	YES	2 Credits	Completion Certificate
4	Azure Administrator	81 Hours	4 Hours	YES	3 Credits	Completion Certificate
5	Azure Security Technologies	27 Hours	4 Hours	YES	1 Credit	Completion Certificate
6	Cybersecurity Architect	54 Hours	4 Hours	YES	2 Credits	Completion Certificate
		324 Hours			12 Credits	
Students earn the 'Cloud and Cybersecurity Professional Certificate' after completing all 6 courses						

#### Students complete the study program at their own pace.



### 253

#### ELEMENTS OF CLOUD AND CYBERSECURITY

#### UNITS INCLUDED:

- I. Introduction to Cybersecurity
- 2. Cryptography and Encryption
- 3. Network and Device Threats
- 4. Authentication and Authorization
- 5. Introduction to Cloud Services6. Cybersecurity and Cloud

#### COURSE OVERVIEW

In today's modern world, we are surrounded by technology, devices, and services. Countless innovations have been changing the world, and digital safety has become a concern for individuals and businesses alike. With the rise of cloud-based, device-free services, cybersecurity is becoming increasingly important, and similar development is expected to continue over the following years and decades.

This course introduces you to the basics of cybersecurity and cloud services. You will learn about digital safety, adopt useful and practical skills, and gain a solid foundation on the topics.

#### INTRODUCTION TO CYBERSECURITY

- 1. Basics of Cybersecurity
- 2. Terminology
- 3. Threat Landscape
- 4. Malware
- 5. Mitigation Strategies

#### CRYPTOGRAPHY AND ENCRYPTION

COURSE

- . Basics of Cryptography
- Terminology
- 3. Use Cases of Encryption4. Hashing and Digital Signing
- 5. Digital Certificates

#### NETWORK AND DEVICE THREATS

- Basics of Networks and
- Terminology
- 3. Network and Device Threats
- 4. Mitigating Network and Device Threats

#### AUTHENTICATION AND AUTHORIZATION

- Basics of Authentication
- 2. Terminology
- Authentication-Based Threats
- 4. Authorization and Security

#### **LEARNING**

After completing the course, you will be proficient in the basic elements of cybersecurity and cloud-based services. You will learn how to stay safe online in a business environment and in the basics of cloud services and their potential to revolutionize entire fields of business and life.

#### INTRODUCTION TO CLOUD SERVICES

- Basics of Cloud Computing
- 2. Cloud Terminology
- 3. Consumption-Based Computing
- 4. Benefits of Cloud Computing

#### ng of Cloud

#### CYBERSECURITY

- Basics of Cloud Security
- 2. Terminology
- Zero Trust
   Ethics
- Summary

#### **COURSE CURRICULUM**

This course has been developed by Microsoft Skills for Jobs, KAMK University, and mentor companies with six study units.

#### SCOPE

# COURSE-2 AZURE FUNDAMENTALS

**Microsoft AZ-900** 



#### **UNITS INCLUDED:**

- 1. Introduction to Azure
- 2. Data, Storage and Safety
- 3. Governance and Cost Management

#### **COURSE OVERVIEW**

Azure Fundamentals is a course that focuses on Microsoft Azure, a cloud computing platform offering dozens of services for various use cases.

Cloud platforms, such as Azure, are becoming increasingly popular in today's digital society, and after completing this course, you will have a solid understanding of the opportunities Azure offers.

#### INTRODUCTION TO AZURE

#### SECTIONS INCLUDED:

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

#### DATA, STORAGE AND SAFETY

COURSE 2

#### **SECTIONS INCLUDED:**

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

#### GOVERNANCE AND COST MANAGEMENT

#### **SECTIONS INCLUDED:**

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

#### **LEARNING**

This course is suitable for IT personnel who are just beginning to work with cloud-based solutions and services and if you are new to Azure.

Azure Fundamentals provides you with everything you need to get started with the platform.

#### **COURSE CURRICULUM**

This course has been developed by Microsoft Skills for Jobs, KAMK University, and mentor companies with three study units.

#### **SCOPE**

# COURSE-3 CYBERSECURITY FUNDAMENTALS

**Microsoft SC-900** 

# CYBERSECURITY FUNDAMENTALS

#### **UNITS INCLUDED:**

- 1. Introduction to Azure Security
- 2. Azure Active Directory Services
- 3. Microsoft Compliance Solutions

#### **COURSE OVERVIEW**

Cybersecurity Fundamentals is a course that focuses on cybersecurity within Microsoft platforms. You will learn the essential basics of Microsoft security, compliance, and identity (SCI) solutions, gaining an understanding of how Microsoft SCI solutions provide holistic, end-to-end encrypted cybersecurity capabilities.

#### INTRODUCTION TO AZURE

#### SECTIONS INCLUDED:

- I. Security and Compliance Concepts
- 2. Identity Concepts
- 3. Cybersecurity in Azure
- 4. Security Management in Azure
- Microsoft Sentinel and 365
   Defender

#### AZURE ACTIVE DIRECTORY SERVICES

#### **SECTIONS INCLUDED:**

- 1. Basics of Azure AD
- 2. Identities in Azure AD
- 3. Authentication in Azure AD
- 4. Access Management in Azure AD
- 5. Identity Protection in Azure AD

#### **LEARNING**

This course is designed for learning the fundamentals of security, compliance, and identity (SCI) across cloud-based and related Microsoft services. Coding skills or technical IT experience are not required on this course. However, having general IT knowledge will help you get the most from your learning experience.

It is recommended that you complete the Elements of Cloud and Cybersecurity course before taking this course.

### MICROSOFT COMPLIANCE SOLUTIONS

#### SECTIONS INCLUDED:

- Introduction to
   Compliance
- 2. Microsoft Purview
- Insider Risk Management
- 4. Resource Governance
- 5. Summary

# UNIT3

LEND

#### COURSE CURRICULUM

This course has been developed by Microsoft Skills for Jobs, KAMK University, and mentor companies with three study units.

#### SCOPE



# COURSE-4 **AZURE ADMINISTRATOR**

**Microsoft AZ-104** 



**ADMINISTRATOR** 

#### **UNITS INCLUDED:**

- 1. Basic Azure Services
- Storage in Azure 2.
- 3. Computing Resources
- 4. Virtual Networking
- 5. Monitoring and Maintenance

UNIT 2

#### **COURSE OVERVIEW**

Azure administrators are responsible for project management on Microsoft Azure – a cloud-based platform offering various solutions for different companies. From expansive storage to virtual machines, Azure administrators ensure smooth operations and the successful completion of projects.

#### **BASIC AZURE SERVICES**

#### SECTIONS INCLUDED:

- 1. Azure Resources
- Azure Resource Manager
- 3. Automating Azure Tasks
- 4. Controlling Azure Services
- 5. Identities and Role Management

#### SECTIONS INCLUDED:

1. Storage Accounts and File Explorer

**STORAGE IN** 

**AZURE** 

- 2. Blob Storage
- 3. Azure Files and Synchronization
- 4. Storage Explorer and Tools
- 5. Shared Access Signatures

#### COMPUTING RESOURCES

#### SECTIONS INCLUDED:

- 1. Virtual Machines
- Virtual Machine Availability
- Application Development
- 4. Azure Kubernetes Service
- 5. Automation State Configuration

#### VIRTUAL **NETWORKING**

#### SECTIONS INCLUDED:

- 1. Setting Up Virtual
- Networks 2. Azure Firewall and DNS
- 3. Azure VPN Gateways Routing and Load-
- balancino
- 5. Azure Application Gateways

#### **LEARNING**

This course is developed for aspiring Azure administrators. It encompasses all the knowledge you need to effectively and professionally manage Azure projects. Before starting this course, it is highly recommended to complete the Azure Fundamentals course. Although some of the areas discussed before will be reviewed during this course, having basic Azure knowledge is essential to maximize your learning experience.

#### **MONITORING AND MAINTENANCE**

#### **SECTIONS INCLUDED:**

- 1. Azure Monitor
- Azure Network Watcher
- Azure Monitor Logs
- Azure Backups 5. Summary

#### COURSE CURRICULUM

This course has been developed by Microsoft Skills for Jobs, KAMK University, and mentor companies with five study units.

#### **SCOPE**

### COURSE-5 **AZURE SECURITY TECHNOLOGIES**

**Microsoft AZ-500** 

Azure Security Technologies is a course in Microsoft's cloud-powered platform offering various services for multiple use cases. Cloud platforms, such as Azure, are becoming increasingly popular in today's digital society. Upon completing this course, you will have solid knowledge about the platform's security features.

#### COURSE OVERVIEW

Azure administrators are responsible for project management on Microsoft Azure – a cloud-based platform offering various solutions for different companies. From expansive storage to virtual machines, Azure administrators ensure smooth operations and the successful completion of projects.

#### LEARNING

Coding skills or technical IT experience are not required on this course.

However, having general IT knowledge will help you get the most from your learning experience. It is recommended that you complete the Azure Fundamentals course before taking this course.

#### COURSE CURRICULUM

This course has been developed by Microsoft Skills for Jobs, KAMK University, and mentor companies with three study units.

#### SCOPE

The scope of this course is one European study credits (1 ECTS), and a pass/fail grading system is used. You must complete all assignments to pass the course. You can advance at your own pace, move around the course platform as you go, and take your time for periodic review to get the most out of your studies. Upon completing the course, you will receive a program completion certificate and a shareable badge to showcase your newly acquired skills.



#### 1. Storage Accounts and

- File Explorer
- Blob Storage
- Azure Files and Synchronization
- Storage Explorer and Tools
- 5. Shared Access Signatures

#### SECTIONS INCLUDED: 1. Introduction to Azure **Key Vault** Azure Key Vault Features **Application Security**

1. Securing User Identities

Azure AD Identity

Privileged Identity

5. Governance Strategies

**APPLICATION AND** 

**DATA SECURITY** 

**Data Security** 

5. Summary

Protection

Management

Azure and Passwords

17



### COURSE-6 CYBERSECURITY ARCHITECT

**Microsoft SC-100** 



#### **UNITS INCLUDED:**

- 1. Security Strategies and Resilience
- 2. Compliance and Risk Management
- 3. Infrastructure Security
- 4. Application and Data Security
- 5. Efficient Security Practices

# COURSE 6

#### SECURITY STRATEGIES AND RESILIENCE

#### **SECTIONS INCLUDED:**

- Security Strategy and Architecture
- 2. Building Resiliency
- Building a Strategy
   Developing Security
- 5. Identity Security
  Strategies

### COMPLIANCE AND RISK MANAGEMENT

#### **SECTIONS INCLUDED:**

- 1. Regulatory Compliance Strategies
- 2. Azure Policy
- 3. Risk Management
- 4. Mitigating Risks in Azure
- 5. Cyber Threat Intelligence

#### INFRASTRUCTURE SECURITY

#### SECTIONS INCLUDED:

- 1. Implementing Security Strategies
- 2. Best Practices for Strategy Building
- 3. Security Baselines
- 4. Securing PaaS, laaS, and SaaS
- 5. Securing Workloads

# APPLICATION AND DATA SECURITY

#### SECTIONS INCLUDED:

- Threat Modeling and
   Application Identification
- 2. Application Classification and Security
- 3. Application Development and Security
- 4. Threat Modeling and Data Identification
- 5. Mitigating Data Threats

#### **COURSE OVERVIEW**

By this stage, you should already have quite a broad knowledge about cybersecurity and Microsoft Azure. This course builds on those skills for you to become a trustworthy and skillful Azure cybersecurity architect. Cybersecurity Architects are responsible for designing, building, and maintaining the security functions of an organization's IT environment. Security architects help translate an organization's business and assurance goals into a security vision, providing documentation and diagrams to guide technical security decisions.

#### **LEARNING**

Upon completion of this course, you will possess the skillsets required to ensure that information security requirements, essential for safeguarding the organization's core missions and business processes, are effectively addressed in all aspects of enterprise architecture. This includes reference models, segment and solution architectures, and the resulting information systems supporting those missions and business processes

#### **COURSE CURRICULUM**

This course has been developed by Microsoft Skills for Jobs, KAMK University, and mentor companies with five study units.

#### EFFICIENT SECURITY PRACTICES

#### SECTIONS INCLUDED:

- Best Practices and
   Antipatterns
- 2. Assessing Security Performance
- 3. Cloud Adoption Framework
- 4. Mitigating Ransomware Attacks Summary

### UNIT 5

#### **SCOPE**



Get globally-recognized ICT Professional Certificates from the KAMK University, Microsoft and Mentor Companies

#### **Course Completion Certificate**



#### **Cloud and Cybersecurity Professional Certificate**



"Great course, it really helped me understand the functions of the Azure ecosystem and made me want to learn more about it. I had no idea it was so vast and all-encompassing!"

"I am an ICT-engineer and working with data/sensitive data in my work and I found this course to be a great addition to what I already knew. Keep up the good work and I look forward to more courses like this."

"I love that there were a lot of exercises and videos. If it just text, especially long paragraphs, it can get a bit tedious sometimes, but I felt like there was a perfect balance between different types of learning material."

"Very tight and clear sections. Easy to study and learn. Exams were helpful to summarize what had just been taught and learnt."

"It organizes all the introductions with exercises with videos very well. Thank you."

"Thank you very much for the clear course, appropriately extensive tasks, and a well-functioning platform."

"I am very pleased Microsoft offered this. Looking forward to many other new courses to come."

"A well-executed learning platform plays a big role as a motivator and this program nails it."

"Just amazing, the UI is clean. Texts are short enough and well written."

"It was a full-on knowledge experience."



#### KAMK UNIVERSITY EDUCATIONAL BOARD, MICROSOFT SKILLS FOR JOBS



Matti Sarén PhD, eMBA Rector, CEO KAMK University



Tia Ainola
Education Lead at Microsoft
Microsoft



Kimmo Nikkanen Microsoft Program Director KAMK University



Mikko Saari PhD, Pedagogical Director KAMK University



Mikko Keranen R&D Director, Employment KAMK University



Miika Lippojoki Director of IT Services KAMK University



Sayed Jawed Founder & CEO Vendor Junction Group



Jarmo Järvenpää Board Member Vendor Junction Group

#### **ELIGIBILITY**

Proficiency in English language reading and writing skills.

For Cloud and Cybersecurity study program, the most important asset is your attitude.

You may already have some cloud and cybersecurity knowledge or be a total beginner, both are totally fine!

Basic IT and programming knowledge may come in handy but are not necessary.

#### **ADMISSIONS DETAILS**

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