KAMK University Finland

Microsoft

A JOINT PROGRAM BY KAMK UNIVERSITY AND MICROSOFT
WITH EUROPEAN HIGHER EDUCATION TRANSFER CREDITS (ECTS)

MICROSOFT SKILLS FOR JOBS MICRODEGREE PROGRAMS

CLOUD AND CYBERSECURITY

SELF-PACED | 7 CERTIFICATES | ONLINE | IN-CLASS MENTORSHIP (Optional) | ASSESSMENTS & EXAMS BASED

IN PARTNERSHIP WITH GLOBAL MENTOR COMPANIES

MICORSOFT SKILLS FOR JOBS MICRODEGREE PROGRAMS BROUGHT TO YOU BY

Microsoft   Crayon   tietoevry   ARROW   ATEA   CYBERCOACH

DIGITAL WORKFORCE™   enfo   FORWARD FOREVER   SULAVA   KAMK University Finland

FINLAND EDUCATION SYSTEM WORLD RANKING

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

BEST UNIVERSITIES IN THE WORLD

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.

PROGRAMS

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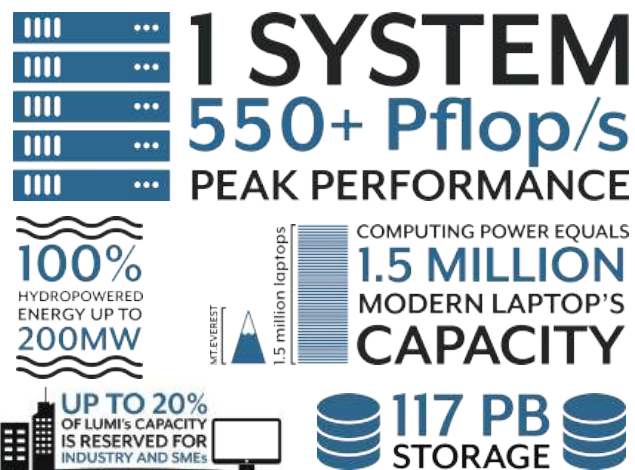- MSc Technology Management

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

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.

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.

1 SYSTEM 550+ Pflop/s PEAK PERFORMANCE

100% HYDROPOWERED ENERGY UP TO 200MW

COMPUTING POWER EQUALS 1.5 MILLION MODERN LAPTOP'S CAPACITY

MT.EVEREST | 1.5 million laptops

UP TO 20% OF LUMI's CAPACITY IS RESERVED FOR INDUSTRY AND SMEs

117 PB STORAGE

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.
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.

The Microdegree Programs award certificates with ECTS credits, enhancing job prospects in local and international markets and providing a pathway to pursue a Bachelor's or Master's degree in Finland and EU countries.

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

MICROSOFT SKILLS FOR JOBS
MICRODEGREE PROGRAMS

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

Cloud and Cybersecurity

12 ECTS · 324 hours · 6 course

KAMK University - Microsoft Partnership Program with Mentor Companies

Microdegree ★★★★★

Power Platform

8 ECTS · 216 hours · 4 course

KAMK University - Microsoft partnership Program with Mentor Companies

Microdegree ★★★★★

DEV AI

12 ECTS · 324 hours · 7 course

KAMK University - Microsoft Partnership Program with Mentor Companies

Microdegree ★★★★★

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 certfications.

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.

LOCAL JOBS

A database of individuals holding Microdegree Programs certificates will be shared with leading local headhunting firms and employment agencies. The initiative seeks to link qualified individuals with premium local job opportunities.

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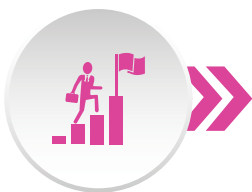
It is clear that cloud computing and cybersecurity are two areas of huge growth opportunities for workers looking for a way to future-proof their career or make an exciting pivot.

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.

COURSE 1

ELEMENTS OF CLOUD AND CYBERSECURITY

UNITS INCLUDED:

1. Introduction to Cybersecurity
2. Cryptography and Encryption
3. Network and Device Threats
4. Authentication and Authorization
5. Introduction to Cloud Services
6. Cybersecurity and Cloud

COURSE 2
Microsoft AZ-900

AZURE FUNDAMENTALS

UNITS INCLUDED:

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

COURSE 3
Microsoft SC-900

CYBERSECURITY FUNDAMENTALS

UNITS INCLUDED:

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

COURSE 4
Microsoft AZ-104

AZURE ADMINISTRATOR

UNITS INCLUDED:

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

COURSE 5
Microsoft AZ-500

AZURE SECURITY TECHNOLOGIES

UNITS INCLUDED:

1. Identity and Access
2. Platform Security
3. Application and Data Security

COURSE 6
Microsoft SC-100

CYBERSECURITY ARCHITECT

UNITS INCLUDED:

1. Security Strategies and Resilience Compliance and Risk
2. Management
3. Infrastructure Security
4. Application and Data Security
5. Efficient Security Practices
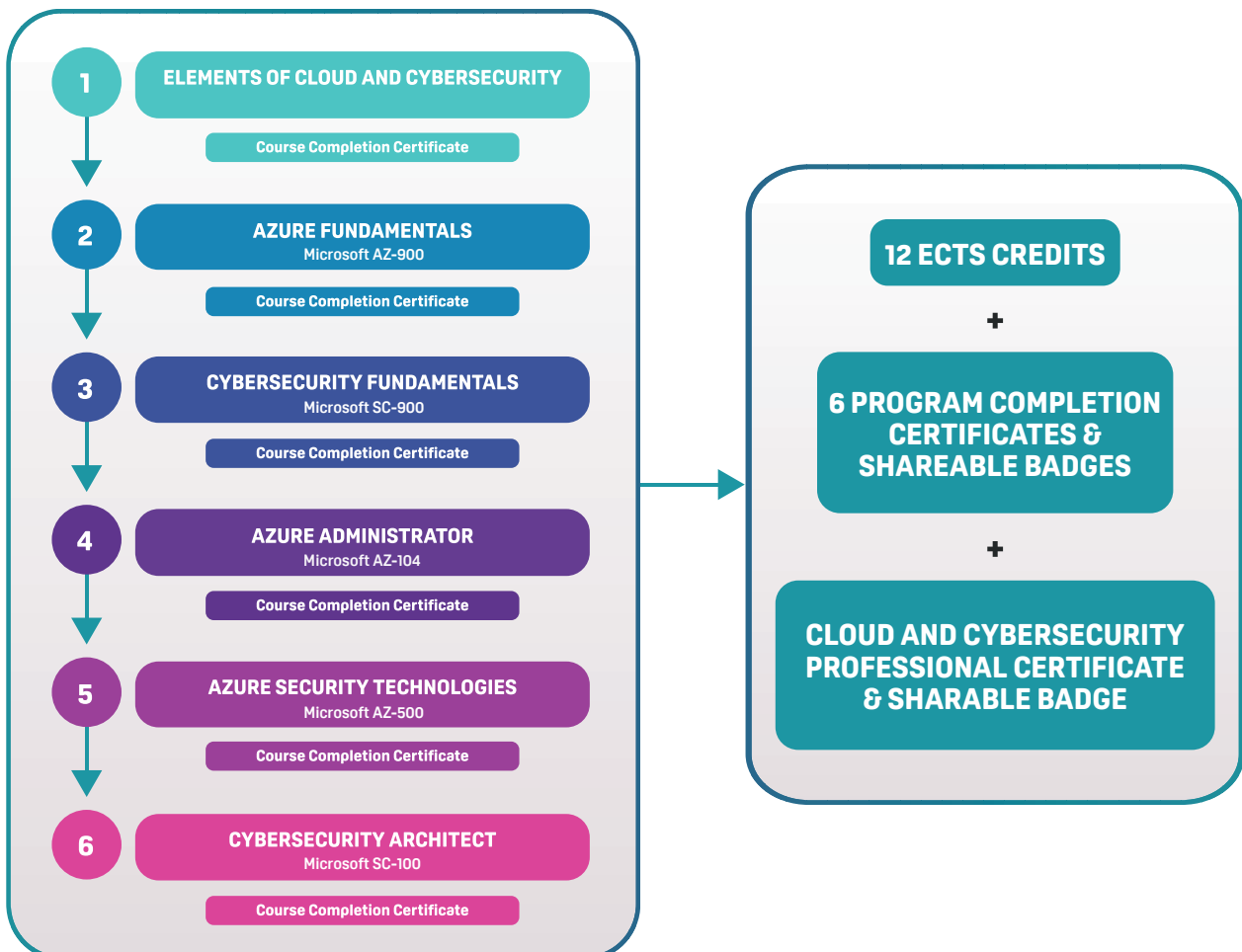
The scope of the study program is a total of six courses with 12 European Study Credits (12 ECTS).
One study credit equals 27 hours of independent study, and the students can complete the courses at their own pace on the KAMK University online study platform, Edukamu. Edukamu works on computers, smartphones, and tablets. No downloads are needed, and you are ready to start immediately.

STUDY PROGRAM

Certificate	Course	Online Self-Study	In-Class Mentorship (optional)	Online Assessments	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.

1 ELEMENTS OF CLOUD AND CYBERSECURITY
Course Completion Certificate

2 AZURE FUNDAMENTALS
Microsoft AZ-900
Course Completion Certificate

3 CYBERSECURITY FUNDAMENTALS
Microsoft SC-900
Course Completion Certificate

4 AZURE ADMINISTRATOR
Microsoft AZ-104
Course Completion Certificate

5 AZURE SECURITY TECHNOLOGIES
Microsoft AZ-500
Course Completion Certificate

6 CYBERSECURITY ARCHITECT
Microsoft SC-100
Course Completion Certificate

12 ECTS CREDITS

+

6 PROGRAM COMPLETION CERTIFICATES & SHAREABLE BADGES

+

CLOUD AND CYBERSECURITY PROFESSIONAL CERTIFICATE & SHARABLE BADGE

COURSE-1
ELEMENTS OF CLOUD
AND CYBERSECURITY

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.

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.

COURSE CURRICULUM

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

SCOPE

The scope of this course is two European study credits (2 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.

ELEMENTS OF CLOUD AND CYBERSECURITY

UNITS INCLUDED:

1. Introduction to Cybersecurity
2. Cryptography and Encryption
3. Network and Device Threats
4. Authentication and Authorization
5. Introduction to Cloud Services
6. Cybersecurity and Cloud

COURSE 1

INTRODUCTION TO CYBERSECURITY

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

UNIT 1

CRYPTOGRAPHY AND ENCRYPTION

1. Basics of Cryptography
2. Terminology
3. Use Cases of Encryption
4. Hashing and Digital Signing
5. Digital Certificates

UNIT 2

NETWORK AND DEVICE THREATS

1. Basics of Networks and Devices
2. Terminology
3. Network and Device Threats
4. Mitigating Network and Device Threats

UNIT 3

AUTHENTICATION AND AUTHORIZATION

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

UNIT 4

INTRODUCTION TO CLOUD SERVICES

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

UNIT 5

CYBERSECURITY AND CLOUD

1. Basics of Cloud Security
2. Terminology
3. Zero Trust
4. Ethics
5. Summary

UNIT 6

COURSE-2 AZURE FUNDAMENTALS

Microsoft AZ-900

AZURE FUNDAMENTALS

UNITS INCLUDED:
1. Introduction to Azure
2. Data, Storage and Safety
3. Governance and Cost Management

COURSE 2

INTRODUCTION TO AZURE

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

UNIT 1

DATA, STORAGE AND SAFETY

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

UNIT 2

GOVERNANCE AND COST MANAGEMENT

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

UNIT 3

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.

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

The scope of this course is two European study credits (2 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.

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.

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.

INTRODUCTION TO AZURE

SECTIONS INCLUDED:

1. Security and Compliance Concepts
2. Identity Concepts
3. Cybersecurity in Azure
4. Security Management in Azure
5. 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

MICROSOFT COMPLIANCE SOLUTIONS

SECTIONS INCLUDED:

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

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 two European study credits (2 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.

COURSE-4 AZURE ADMINISTRATOR

Microsoft AZ-104

AZURE ADMINISTRATOR

COURSE 4

BASIC AZURE SERVICES

SECTIONS INCLUDED:

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

UNIT 1

STORAGE IN AZURE

SECTIONS INCLUDED:

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

UNIT 2

COMPUTING RESOURCES

SECTIONS INCLUDED:

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

UNIT 3

VIRTUAL NETWORKING

SECTIONS INCLUDED:

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

UNIT 4

MONITORING AND MAINTENANCE

SECTIONS INCLUDED:

1. Azure Monitor
2. Azure Network Watcher
3. Azure Monitor Logs
4. Azure Backups
5. Summary

UNIT 5

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

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.

COURSE CURRICULUM

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

SCOPE

The scope of this course is **three European study credits (3 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.

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.

AZURE SECURITY TECHNOLOGIES

UNITS INCLUDED:
1. Identity and Access
2. Platformt Security
3. Application and Data Security

COURSE 5

IDENTITY AND ACCESS

SECTIONS INCLUDED:
1. Securing User Identities
2. Azure and Passwords
3. Azure AD Identity Protection
4. Privileged Identity Management
5. Governance Strategies

UNIT 1

PLATFORM SECURITY

SECTIONS INCLUDED:
1. Storage Accounts and File Explorer
2. Blob Storage
3. Azure Files and Synchronization
4. Storage Explorer and Tools
5. Shared Access Signatures

UNIT 2

APPLICATION AND DATA SECURITY

SECTIONS INCLUDED:
1. Introduction to Azure Key Vault
2. Azure Key Vault Features
3. Application Security
4. Data Security
5. Summary

UNIT 3

COURSE-6 CYBERSECURITY ARCHITECT

Microsoft SC-100

CYBERSECURITY ARCHITECT

UNITS INCLUDED:

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

SECURITY STRATEGIES AND RESILIENCE

SECTIONS INCLUDED:

1. Security Strategy and Architecture
2. Building Resiliency
3. Building a Strategy
4. Developing Security Options
5. Identity Security Strategies

UNIT 1

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

UNIT 2

INFRASTRUCTURE SECURITY

SECTIONS INCLUDED:

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

UNIT 3

APPLICATION AND DATA SECURITY

SECTIONS INCLUDED:

1. 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

UNIT 4

EFFICIENT SECURITY PRACTICES

SECTIONS INCLUDED:

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

UNIT 5

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.

SCOPE

The scope of this course is **two European study credits (2 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.

CERTIFICATES OF COMPLETION

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

Course Completion Certificate

Cloud and Cybersecurity Professional Certificate

All certificates images are for illustrative purpose only. The actual certificate may be subject to change at the discretion of the KAMK University and Microsoft Skills for Jobs

STUDENTS AND IT PROFESSIONALS IN EUROPE SPEAK

"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."
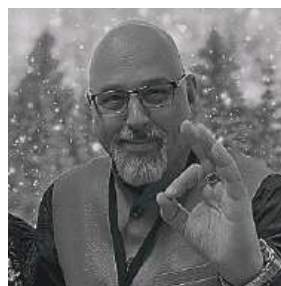
FACULTY AND INDUSTRY PARTNERS

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

HarHub
Program Advisor

Mahamoud Ibrahim

📞 +252634405952

✉ m.ibrahim@harhub.com   🌐 wwwharhub.com

KAMK
University
Finland

Ketunpolku 1, 87100 Kajaani, Finland

📞 +358 40 6548471

✉️ kajaanin.amk@kamk.fi

🌐 www.kamk.fi

HARHUB

HarHub Building, Pepsi, 31 May, Hargeisa, Somaliland

📞 +00252 2 515591 | +252634405952

✉️ m.ibrahim@harhub.com

🌐 www.harhub.com