

## Computer Applications - MODULE MAP 2026-2027

GROUP	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4	PERIOD 5 SUMMER STUDIES
BBCAP26A3	Core competence <b>Introduction to IT Studies</b> Orientation to Studies CA00EE56-3004 Basics of Programming CA00EE58-3004 Operating Systems CA00EE60-3004 Finnish 1 CA00EE62-3004	Core competence <b>Introduction to Software Development</b> Databases CA00EE64-3004 Object-Oriented Programming CA00EE66-3004 Basics of Data Analysis CA00EE68-3004 Computer Networks and Security CA00EE70-3004 Finnish 2 CA00EE72-3004	Core competence <b>Web Development</b> Building a Static Website CA00GE52-3001 Web Programming CA00EE76-3004 Content Management Systems CA00EE78-3004 Finnish 3 CA00EE80-3004	Core competence <b>Software Development</b> Finnish 4 CA00EE82-3004 Innovation project VV00GB64-3010 Applied Application Project TK00GD78-3001 Software Development Tools TK00GD79-3001	Profiling competence <b>Optional studies 15 ECTS</b> (possibility to complete)
				Core competence <b>Cloud Foundations</b> Finnish 4 CA00EE82-3004 Innovation project VV00GB64-3010 Cloud Services TK00GE46-3001 Agile Development Tools TK00GD80-3001	
BBCAP25A3	Core competence <b>Customer Projects</b> Data Processing with Python CA00EE96-3003 Software Testing CA00EE98-3003 Design Factory Project TK00EC76-3003 English Communication in Customer Projects CA00EX53-3002	Core competence <b>Business Analytics</b> Predictive Analytics with Python CA00EF04-3003 Foundations of Data Engineering CA00EF06-3003 Digital and Social Media Analytics CA00EF08-3003	Core competence <b>Automating Business Processes</b> Software Robotics and Automation CA00EF10-3003 Software Design CA00EF12-3003 Minithesis CA00EF14-3003	Profiling competence <b>Full-Stack Web Development</b> JavaScript TK00EG67-3301 Front-end Development CA00GD84-3001 Backend Development CA00GD85-3001 Full-Stack Web Application Project CA00GD86-3001	Profiling competence <b>Optional studies 15 ECTS</b> (possibility to complete)
				Profiling competence <b>Data Science</b> Mathematics for Data Science with Python TK00FR36-3002 Applied Machine Learning TK00FR37-3002 Big Data Analytics TK00FR38-3002	
				Profiling competence <b>Delivering Software Products</b> Software Delivery Models & Methods TK00ED18-3002 Web Servers TK00ED20-3003 Containerization TK00ED22-3003 Software Delivery Tools TK00ED24-3003	Core competence <b>Work placement 30 ECTS</b> (possibility to complete)

BBCAP24A3	Profiling competence <b>Mobile Programming</b> Virtualization Techniques for Software Developers TK00ED00-3002 Cross-platform Development TK00ED02-3002 Mobile Programming Project TK00ED04-3002	Profiling competence <b>Game Development</b> 3D Modelling TK00ED32-3002 Game Programming TK00EX51-3003 Game Development Project TK00EX52-3003	Profiling competence <b>Optional studies 15 ECTS</b> (if not completed before)	Core competence <b>Thesis 15 ECTS</b>	Core competence <b>Work placement 30 ECTS</b> (possibility to complete)
	Profiling competence <b>Machine Learning &amp; AI</b> Neural Networks for Computer Vision TK00FR39-3001 AI Search Algorithms TK00FR40-3001 Development of AI Applications TK00FR41-3001	Profiling competence <b>Cybersecurity</b> Cybersecurity TK00FR42-3002 Cyber Attacks and Defense Methods TK00FR43-3002 Penetration Tests, Audits and Red Teaming TK00FR44-3002			
	Profiling competence <b>Cloud Computing</b> Cloud Computing TK00ED26-3002 Multicloud Management TK00ED28-3002 Cybersecurity in Cloud Environments TK00ED30-3002	Profiling competence <b>ICT Project</b> ICT Project and Product Planning TK00EX49-3003 ICT Project and Product Implementation TK00EX50-3003			
BBCAP23A3	Core competence <b>Work placement 30 ECTS</b> (if not completed before)	Core competence <b>Work placement 30 ECTS</b> (if not completed before)			