

## 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 CA00FF72-3004	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 TK00GE67-3301 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	

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