Preliminary syllabus for the academic year 2025-2026
Bachelor's Programme in Computer Science

Code	Course unit name	Scope (cr)	Teaching periods	Method of teaching	Teaching languages	Open to exchange students	Open to students from other degree programmes	Open university teaching	Open university teaching fees
Basic Studies	-	-	-	-	-	-	-	-	
TKT10002	Introduction to Programming	5 cr	1	Distance teaching (time-bound) or online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT10002	Introduction to Programming	5 cr	all year around	Distance teaching (time-bound) or online teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10003	Advanced Course in Programming	5 cr	2	Distance teaching (time-bound) or online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT10003	Advanced Course in Programming	5 cr	all year around	Distance teaching (time-bound) or online teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10002	Introduction to Programming	5 cr	1	Blended teaching	Svedish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10003	Advanced Course in Programming	5 cr	2	Blended teaching	Svedish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10004	Introduction to Databases	5 cr	1	Online teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10004	Introduction to Databases	5 cr	3	Online teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10004	Introduction to Databases	5 cr	May	Online teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT10006	Computer and Internet	5 cr	1-2	Contact teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	-
TKT200011	Data Structures and Algorithms I	5 cr	1	Will be specified later	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT200011	Data Structures and Algorithms I	5 cr	3	Blended teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
Intermediate studies	-	-	-	-	-	-	-	-	
TKT20005	Models of Computation	5 cr	1	Contact teaching	Finnish	No	No	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20006	Software Engineering	5 cr	2	Contact teaching	Finnish	No	No	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20007	Software Lab	10 cr	1-2	Contact teaching	Finnish	No	No	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20007	Software Lab	10 cr	3-4	Contact teaching	Finnish	No	No	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20007	Software Lab	10 cr	summer 2026	Contact teaching	Finnish	No	No	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT200012	Data Structures and Algorithms II	5 cr	2	Will be specified later	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT200012	Data Structures and Algorithms II	5 cr	4	Blended teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20016	Computing platforms	5 cr	3	Contact teaching	Lectures in English, exercise groups in English and Finnish	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20019	Databases and Web Programming	5 cr	1	Online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT20019	Databases and Web Programming	5 cr	2	Online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT20019	Databases and Web Programming	5 cr	3	Online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT20019	Databases and Web Programming	5 cr	4	Online teaching	Finnish	No	Yes	Course unit is only for degree students.	-

Code	Name	Credits	Timing	Teaching method	Language			Availability	Fees
TKT20019	Databases and Web Programming	5 cr	May-June	Online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT20019	Databases and Web Programming	5 cr	July-August	Online teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT200091	Cyber Security Base: Introduction to Cyber Security	1 cr	all year around, excluding January	Will be specified later	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT200092	Cyber Security Base: Securing Software	3 cr	all year around, excluding January	Will be specified later	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT200093	Cyber Security Base: Course Project I	1 cr	all year around, excluding January	Will be specified later	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT200151	Computing and Society: an introduction	2 cr	1-4	Online teaching	Finnish, English	Yes	Yes	Course unit is both for degree students and open university studies.	No fee.
TKT200153	Computing and Society (contact teaching)	3 cr	1-2	Contact teaching	Finnish, (integrated English studies)	No	Yes	Course unit is only for degree students.	-
TKT200152	Computing and Society: continuation course (online)	3 cr	4	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20010	Algorithms and Artificial Intelligence Project	4 cr	1	Laboratory work	Finnish, English	Yes	Yes	Course unit is only for degree students.	-
TKT20010	Algorithms and Artificial Intelligence Project	4 cr	2	Blended teaching	Finnish, English	Yes	Yes	Course unit is only for degree students.	-
TKT20010	Algorithms and Artificial Intelligence Project	4 cr	3	Blended teaching	Finnish, English	Yes	Yes	Course unit is only for degree students.	-
TKT20010	Algorithms and Artificial Intelligence Project	4 cr	4	Blended teaching	Finnish, English	Yes	Yes	Course unit is only for degree students.	-
TKT20010	Algorithms and Artificial Intelligence Project	4 cr	May-June	Blended teaching	Finnish, English	Yes	Yes	Course unit is only for degree students.	-
TKT20010	Algorithms and Artificial Intelligence Project	4 cr	July-August	Blended teaching	Finnish, English	Yes	Yes	Course unit is only for degree students.	-
TKT20012	Data Communication Project	4 cr	May	Contact teaching	Finnish, English	No	No	Course unit is only for degree students.	-
TKT20018	Intermediate Studies Project: Software Development Methods	4 cr	2	Contact teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20018	Intermediate Studies Project: Software Development Methods	4 cr	4	Contact teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT20013	Bachelor's Thesis	6 cr	1-2	Contact teaching	Finnish	No	No	Course unit is only for degree students.	-
TKT20013	Bachelor's Thesis	6 cr	3-4	Blended teaching	Finnish	No	No	Course unit is only for degree students.	-
Optional Intermediate studies		-	-	-	-	-	-	-	-
TKT21004	Computer Architecture	5 cr	4	Lectures	English	No	Yes	Course unit is only for degree students.	-
TKT21032	Competitive Programming Training 1	3 cr	all year around	Distance teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT21033	Competitive Programming Training 2	2 cr	all year around	Distance teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT21034	Competitive Programming Training 3	3 cr	all year around	Distance teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT21035	Competitive Programming Training 4	2 cr	all year around	Distance teaching	Finnish	No	Yes	Course unit is only for degree students.	-
TKT21012	Algorithms for Solving Problems	10 cr	all year around	Distance teaching	Finnish	No	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21029	Functional Programming I	5 cr	all year around	Distance teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21030	Functional Programming II	5 cr	all year around	Distance teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21018	Elements of AI: Introduction to AI	2 cr	all year around	Online teaching	Finnish, Swedish, English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT210281	Elements of AI: Building AI - Intermediate	1 cr	all year around	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.

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TKT210282	Elements of AI: Building AI - Advanced	1 cr	all year around	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21031	Ethics of AI	2 cr	all year around	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21036	DevOps with Docker	1 cr	4	Distance teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21037	DevOps with Docker: docker-compose	1 cr	4	Distance teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21038	DevOps with Docker: security and optimization	1 cr	4	Distance teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21026	Network programming	5 op	3	Contact teaching	English	Yes	Yes	Course unit is only for degree students.	-
TKT21039	Core 5G and Beyond	2 cr	all year around	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21040	Test-Driven Development	4 cr	3	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT21041	Test-Driven Development: Full Stack	1 cr	3	Online teaching	English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
Other studies	-	-	-	-	-	-	-	-	-
TKT50004	Academic skills	1 cr	1, 4	Contact teaching	Finnish	No	No	Course unit is only for degree students.	-
TKT500031	Computing Tools for CS Studies	1 cr	summer, 1-2	Online teaching	Finnish, English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.
TKT500031	Computing Tools for CS Studies	1 cr	3-4, summer	Online teaching	Finnish, English	Yes	Yes	Course unit is both for degree students and open university studies.	Possible fees will be added later.