

Bachelor's Programme in Science Preliminary Teaching Programme 2024-2025

Code	Course unit name	Scope (cr)	Teaching periods	Teaching language(s)	Mode of teaching	Open to exchange students	Open university teaching	Open to students of other degree programmes
BS4001A	Introduction to Modern Science	2 cr	1	English	Contact teaching	No	No	No
BS4001B	Modern Science Working Groups	5 cr	2	English	Contact teaching	No	No	No
BS4005	Seminar	4 cr	lectures 1, seminar presentation 2 or 4	English	Contact teaching	No	No	No
MATH&STAT								
BSMA1001	Linear algebra and complex numbers	5 cr	1	English	Contact teaching	Yes	Yes	No
BSMA1002	Calculus IA: Limits and differentiation	5 cr	2	English	Contact teaching	Yes	Yes	Yes
BSMA1003	Calculus IB: Integration	5 cr	3	English	Contact teaching	Yes	Yes	Yes
BSMA1004	Advanced calculus	5 cr	3	English	Contact teaching	Yes	Yes	Yes
BSMA1006	Probability Calculus I	5 cr	3	English	Contact teaching	Yes	Yes	Yes
BSMA2001	Linear algebra and matrices II	5 cr	4	English	Contact teaching	Yes	Yes	Yes
BSMA2002	Introduction to vector analysis	5 cr	1	English	Contact teaching	Yes	No	Yes
BSMA2003	Measure and integration	5 cr	3	English	Contact teaching	Yes	No	Yes
BSMA2007	Differential equations	5 cr	4	English	Contact teaching	Yes	Yes	Yes
BSMA2010	Series	5 cr	4	English	Online teaching	Yes	No	Yes
CS&DS								
BSCS1001	Introduction to Programming	5 cr	Lectures in period 1, other times on own pace	English	Distance teaching (time-bound) or online teaching	Yes	Yes	No
BSCS1001	Introduction to Programming	5 cr	First lecture in period 3, other times on own pace	English	Distance teaching (time-bound) or online teaching	Yes	Yes	Yes
BSCS1002	Advanced Course in Programming	5 cr	Lectures in period 2, other times on own pace	English	Distance teaching (time-bound) or online teaching	Yes	Yes	No
BSCS1002	Advanced Course in Programming	5 cr	First lecture in period 4, other times on own pace	English	Distance teaching (time-bound) or online teaching	Yes	Yes	Yes
BSCS10031	Data structures and Algorithms I	5 cr	3	English	Online teaching	Yes	Yes	Yes
BSCS1005	Introduction to Databases	5 cr	1	English	Blended teaching (includes both contact and distance teaching)	Yes	Yes	Yes
BSCS1006	Computer and Internet	5 cr	3-4	English	Blended teaching (includes both contact and distance teaching)	Yes	Yes	Yes

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BSCS2002	Computing and Society	Teaching with codes TKT200151 and TKT200152 see the teaching programme of Bachelor's programme in Computer Science						
BSCS2004	Models of Computation	5 cr	4	English	Contact teaching	Yes	Yes	Yes
BSCS2006	Data structures and Algorithms II	5 cr	4	English	Online teaching	Yes	Yes	Yes
BSCS2011	Programming for Performance	5 cr	4	English	Contact teaching	Yes	No	Yes
BSCS2012	Algorithms and AI Lab	4 cr	1	English	Blended teaching (includes both contact and distance teaching)	No	No	No
BSCS2012	Algorithms and AI Lab	4 cr	2	English	Blended teaching (includes both contact and distance teaching)	No	No	No
BSCS2012	Algorithms and AI Lab	4 cr	3	English	Blended teaching (includes both contact and distance teaching)	No	No	No
BSCS2012	Algorithms and AI Lab	4 cr	4	English	Blended teaching (includes both contact and distance teaching)	No	No	No
BSCS2012	Algorithms and AI Lab	4 cr	summer	English	Blended teaching (includes both contact and distance teaching)	No	No	No
BSCS2013	Networking Lab	4 cr	May intensive period	English	Contact teaching	No	No	No
BSCS1004	Computer Organization	5 cr	1-4	English	Online teaching	No	No	Yes
BSCS2005	Introduction to Networking		1-4	English	Online teaching	No	No	Yes
BSCS2015	Data Analysis with Python	5 cr	2, 3, 4	English	Online teaching	Yes	Yes	Yes
PHYSICS	-	-	-	-	-	-	-	-
BSPH1001	Interactions and bodies	5 cr	3	English	Contact teaching	Yes	Yes	Yes
BSPH1002	Matter and interactions	5 cr	4	English	Contact teaching	Yes	Yes	Yes
BSPH1003	Electromagnetism	5 cr	1	English	Contact teaching	Yes	Yes	Yes
BSPH1004	Radiation fields and photons	5 cr	2	English	Contact teaching	Yes	Yes	Yes
BSPH2001	Basics of thermophysics	5 cr	3	English	Contact teaching	Yes	No	Yes
BSPH2002	Thermodynamic potentials	5 cr	4	English	Contact teaching	Yes	No	Yes
BSPH2003	Physical basis of computing	5 cr	2	English	Blended teaching (includes both contact and distance teaching)	Yes	No	Yes
BSPH2004	Introduction to quantum physics	5 cr	2	English	Contact teaching	Yes	Yes	Yes
BSPH2005	Applications of quantum physics I: atoms and molecules	5 cr	3	English	Blended teaching (includes both contact and distance teaching)	Yes	No	Yes
BSPH2006	Applications of quantum physics II: solid state and elementary particles	5 cr	4	English	Contact teaching	Yes	No	Yes
BSPH2008	Introduction to Relativity Theory	5 cr	1	English	Contact teaching	Yes	No	Yes

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BSPH2008	Basics of Astronomy I	5 cr	1	English	Contact teaching	Yes	Yes	Yes
BSPH2009	Basics of Astronomy II	5 cr	2	English	Contact teaching	Yes	Yes	Yes
BSPH2011	Introduction to Solid Earth Geophysics	5 cr	3	English	Contact teaching	Yes	No	Yes
			from september					
BSPH4001	Sustainability in Space	2 cr	onwards	English	Online teaching	Yes	No	Yes
CHEMISTRY	-	-	-	-	-	-	-	-
BSCH1001	Atoms, Molecules and Interactions	5 cr	3	English	Contact teaching	Yes	Yes	Yes
BSCH1002	Energy, Reactivity and Chemical Equilibrium	5 cr	4	English	Contact teaching	Yes	Yes	Yes
BSCH1003	Organic Chemistry 1	5 cr	3	English	Contact teaching	Yes	Yes	Yes
BSCH1004	Inorganic Chemistry	5 cr	2	English	Contact teaching	Yes	Yes	Yes
					Blended teaching (includes both contact and distance teaching)			
BSCH2001	Organic Chemistry 2	5 cr	2	English	teaching)	Yes	No	Yes
BSCH2002	Resolving structure of molecules	5 cr	1	English	Contact teaching	Yes	No	Yes