

STUDY PROGRAMME CURRICULUM STATISTICS

Version (valid from): 2022-4 (01. 10. 2022)

Name of study programme	Statistics
Programme characteristics	interdisciplinary
Type	doctoral
Cycle	doctoral
University of Ljubljana members	<ul style="list-style-type: none"> • Biotechnical Faculty, Jamnikarjeva ulica 101, 1000 Ljubljana, Slovenija • School of Economics and Business, Kardeljeva ploščad 17, 1000 Ljubljana, Slovenija • Faculty of Social Sciences, Kardeljeva ploščad 5, 1000 Ljubljana, Slovenija • Faculty of Electrical Engineering, Tržaška cesta 25, 1000 Ljubljana, Slovenija • Faculty of Mathematics and Physics, Jadranska ulica 19, 1000 Ljubljana, Slovenija • Faculty of Arts, Aškerčeva 2, 1000 Ljubljana, Slovenija • Faculty of Medicine, Vrazov trg 2, 1000 Ljubljana, Slovenija

Year 1

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0020676	Obligatory course 1		50	20				230	300	10		no
2.	0020675	Obligatory course 2		24	12				114	150	5		no
3.	0020674	Elective course 1		24	12				114	150	5		yes
4.	0020677	Elective course 2		24	12				114	150	5		yes
5.	0020678	Elective course 3		24	12				114	150	5		yes
6.	0020679	Individual research work 1						900		900	30		no
Total				146	68	0	0	900	686	1800	60		

Year 2

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020680	Obligatory module course		24	24				402	450	15		no
2.	0083413	Presentation of the doctoral dissertation topic or doctoral exam						150		150	5		no
3.	0020682	Individual research work 2						1200		1200	40		no
Total				24	24	0	0	1350	402	1800	60		

Year 3

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0141334	Individual research work 3						1800		1800	60		no
Total				0	0	0	0	1800	0	1800	60		

Year 4

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020684	Presentation of the doctoral dissertation before public defence						150		150	5		no
2.	0020685	Public defence of the doctoral dissertation						150		150	5		no
3.	0138094	Individual Research Work 4						1500		1500	50		no

	Total	0	0	0	0	1800	0	1800	60	
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Obligatory courses

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0020672	New Developments in Statistics	Aleš Žiberna	50	20				230	300	10		no
2.	0020713	Methodology of Statistical Research	Mihael Perman	24	12				114	150	5		no
3.	0020680	Obligatory module course		24	24				402	450	15		no
	Total			98	56	0	0	0	746	900	30		

Each student must complete three obligatory core courses. *New Developments in Statistics* and *Methodology of Statistical Research* are obligatory in the 1st year for all students. Students of the 2nd year select one obligatory course from the courses in *Selected Topics* (on the relevant module).

Elective courses

	University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
				Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					
1.	0020721	Categorical data analysis	Miroslav Verbič	24	12				114	150	5		yes
2.	0020722	Network Analysis	Vladimir Batagelj	24	12				114	150	5		yes
3.	0020725	Network Analysis in Business and Economics	Marko Pahor	24	12				114	150	5		yes
4.	0020726	Customer Data Analysis	Irena Ograjenšek	24	12				114	150	5		yes
5.	0020727	Reliability and Life Testing	Gregor Dolinar	24	12				114	150	5		yes
6.	0020728	Survey Methodology	Valentina Hlebec	24	12				114	150	5		yes

7.	0020729	Demographic Analysis and Models	Jože Sambt	24	12				114	150	5		yes
8.	0020730	Index Numbers and Composite Indicators	Jože Sambt	24	12				114	150	5		yes
9.	0020731	Internet Mediated Research	Bojana Lobe, Katja Lozar Manfreda, Luka Kronegger	24	12				114	150	5		yes
10.	0020732	Qualitative research for business	Irena Ograjenšek	24	12				114	150	5		yes
11.	0020733	Linear algebra for multivariate methods	Damjana Kokol Bukovšek	24	12				114	150	5		yes
12.	0190619	Mathematical Statistics	Mihael Perman	24	12				114	150	5		yes
13.	0020734	Modern Psychometric Test Theory	Gregor Sočan	24	12				114	150	5		yes
14.	0020735	Multivariate Analysis	Aleš Žiberna	24	12				114	150	5		yes
15.	0020736	National accounts and transfers across generations	Jože Sambt	24	12				114	150	5		yes
16.	0020737	Design and Analysis of Experiments	Katarina Košmelj	24	12				114	150	5		yes
17.	0020738	Data Processing in Official Statistics	Mojca Bavdaž	24	12				114	150	5		yes
18.	0020739	Data Mining	Blaž Zupan	24	12				114	150	5		yes
19.	0020740	Data Mining and Knowledge Discovery	Nada Lavrač	24	12				114	150	5		yes
20.	0020741	Statistical Computing	Nataša Kejžar	24	12				114	150	5		yes
21.	0020742	Stochastic Processes	Janez Bernik	24	12				114	150	5		yes

22.	0020743	Modern econometric analysis 1	Miroslav Verbič	24	12				114	150	5		yes
23.	0020744	Modern econometric analysis 2	Miroslav Verbič	24	12				114	150	5		yes
24.	0020863	Statistical Quality Control	Irena Ograjenšek	24	12				114	150	5		yes
25.	0020864	Statistical Background of Bioinformatics	prof. dr. Kristina Gruden	24	12				114	150	5		yes
26.	0020865	Statistical systems in economics and business sciences	Mojca Bavdaž	24	12				114	150	5		yes
27.	0020866	Statistical consulting	Irena Ograjenšek	24	12	12			102	150	5		yes
28.	0020867	Environmental Statistics	Damijana Kastelec	24	12				114	150	5		yes
29.	0020868	Technical Statistics	Melita Hajdinjak	24	2	10			114	150	5		yes
30.	0020869	Multilevel regression models	Marko Pahor	24	12				114	150	5		yes
31.	0020870	Data Collection in Official Statistics	Mojca Bavdaž	24	12				114	150	5		yes
Total				744	362	22	0	0	3522	4650	155		

Candidates are free to choose between 31 elective courses worth 5 ECTS from the list. They can select 10 ECTS from elective courses from other doctoral programmes at the University of Ljubljana and comparable programmes of foreign universities. The selected courses must be approved by the mentor and the module coordinator.

Students of the module Mathematical Statistics choose one course from the list of elective courses in the Interdisciplinary Doctoral Programme in Statistics, whereby they cannot choose courses for non-mathematicians, and two elective courses offered at the Faculty of Mathematics and Physics, Department of Mathematics.

Biostatistics (module)

Obligatory module course

University Course Code	Course title	Lecturers	Contact hours					Individual student work	Total hours	ECTS	Semesters	Elective
			Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study					

1.	0020714	Selected Topics in Biostatistics	Maja Pohar Perme	24	24			100	302	450	15		no
		Total		24	24	0	0	100	302	450	15		

Statistics for Social Sciences (module)

Obligatory module course

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020715	Selected Topics in Social Science Statistics	Aleš Žiberna	24	24				402	450	15		no
		Total		24	24	0	0	0	402	450	15		

Economic and Official Statistics (module)

Obligatory module course

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020716	Selected Topics in Economic and Official Statistics	Mojca Bavdaž	72	36				342	450	15		no
		Total		72	36	0	0	0	342	450	15		

Mathematical Statistics (module)

Obligatory module course

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020718	Selected Topics in Mathematical Statistics	prof. dr. Jaka Smrekar	24	24				402	450	15		no
		Total		24	24	0	0	0	402	450	15		

Business Statistics (module)

Obligatory module course

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020717	Selected Topics in Business Statistics	Irena Ograjenšek	72	36				342	450	15		no
Total				72	36	0	0	0	342	450	15		

Psychological Statistics (module)

Obligatory module course

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020719	Selected Topics in Psychological Statistics	Gregor Sočan	24	24				402	450	15		no
Total				24	24	0	0	0	402	450	15		

Technical Statistics (module)

Obligatory module course

				Contact hours									
	University Course Code	Course title	Lecturers	Lectures	Seminar	Tutorials	Clinical tutorials	Other forms of study	Individual student work	Total hours	ECTS	Semesters	Elective
1.	0020720	Selected Topics in Technical Statistics	Gregor Dolinar	24	24				402	450	15		no
Total				24	24	0	0	0	402	450	15		