



University of Minho
2022/2023

Information about the first semester

Specialized Modules in Mathematics and Applications A

Structural courses

Schedule

Students in each course

Specialized Modules in Mathematics and Applications B

Optional courses

Students in each course

Specialized Modules in Mathematics and Applications A Structural courses – Sem 1					
Advanced Topics in	Module	Professor	email	Universidade	Hours
Álgebra, Lógica e Computação	Module 1	Manuel Delgado	mdelgado@fc.up.pt	UPorto	20 hours
Álgebra, Lógica e Computação	Module 2	Pedro Patrício	pedro@math.uminho.pt	UMinho	20 hours
Álgebra, Lógica e Computação	Module 3	Maria Elisa Fernandes	maria.elisa@ua.pt	UAveiro	16 hours
Análise e Optimização	Module 1	Lisa Santos	lisa@math.uminho.pt	UMinho	16 hours
Análise e Optimização	Module 2	Gueorgui Smirnov	smirnov@math.uminho.pt	UMinho	20 hours
Análise e Optimização	Module 3	Fernando Arménio Fontes	faf@fe.up.pt	UPorto	20 hours
Probabilidade e Estatística	Module 1	Margarida Brito	mabrito@fc.up.pt	UPorto	28 hours
Probabilidade e Estatística	Module 2	Inês Sousa	isousa@math.uminho.pt	UMinho	28 hours
Dinâmica e Geometria	Module 1	Davide Azevedo	davidemsa@math.uminho.pt	UMinho	28 hours
Dinâmica e Geometria	Module 2	Ana Paula Dias	apdias@fc.up.pt	UPorto	28 hours

Year	Number	Name	Email	Edit	Nationality	ATALC	ATAO	ATDG	ATPE
Professors >>>>						MD-PP-MEF	LS-GS-FF	DA-APD	MB-IS
1	1	ID00000	Elsa Pombo Soares	pg40154@alunos.uminho.pt Fellow CMAT	2023	Portugal			
2	1	ID10604	Faustino António Maciala	ID10604@alunos.uminho.pt fausmaciala@gmail.com	2023	Angola			
3	1	ID10605	Jhonathan David Barrios Martinez	ID10605@alunos.uminho.pt jhonathanbarrios21@gmail.com	2023	Colombia			
4	1	ID00000	Moisés André Augusto	moisesandreaugusto@gmail.com	2023	Mozambique			
5	1	ID10608	Paulo Jorge da Silva Barbosa	ID10608@alunos.uminho.pt pjbarbosa98@gmail.com	2023	Portugal			
6	1	ID10609	Richard Murdoch Montgomery	ID10609@alunos.uminho.pt montgomery@usp.br	2023	Brazil			
7	1	ID10603	Salah Chaib	ID10603@alunos.uminho.pt salahchaib.math@gmail.com	2023	Algeria			
8	1	ID10610	Tarikul Islam	ID10610@alunos.uminho.pt tarikulamath@gmail.com	2023	Bangladesh			
9	2	ID10275	Ana Catarina Lopes Carvalho Sousa	ID10275@alunos.uminho.pt ana_96_sousa@hotmail.com	2023	Portugal			
10	2	ID10307	Catarina Justino Faustino	ID10307@alunos.uminho.pt catarina.0109.cf@gmail.com	2023	Portugal			
Number of Students in each UC						2	5	2	9

ATALC	Advanced Topics in Algebra Login and Computation	ATAO	Advanced Topics in Analysis and Optimization
ATDG	Advanced Topics in Dynamics and Geometry	ATPE	Advanced Topics in Probability and Statistics

	Monday morning	Monday afternoon	Tuesday morning	Tuesday afternoon	Tuesday afternoon	Wednesday morning	Wednesday afternoon	Thursday morning	Thursday afternoon	Friday morning	Friday afternoon
Week 1 3 Oct			TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-MD 14:30-18:30	5 Oct	5 Oct				TAAO - LS 14:00-18:00
Week 2 10 Oct	TAAO - LS 9:00-13:00		TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-MD 14:30-18:30	TAPE-MB 9:30-12:30	TAPE-MB 14:00-17:00				Seminar
Week 3 17 Oct	TAAO - LS 9:00-13:00		TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-MD 14:30-18:30	TAPE-MB 9:30-12:30	TAPE-MB 14:00-17:00				Seminar
Week 4 24 Oct	TAAO - LS 9:00-13:00		TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-MD 14:30-18:30	TAPE-MB 9:30-12:30	TAPE-MB 14:00-17:00				Seminar
Week 5 31 Oct			1 Nov	1 Nov	1 Nov	TAPE-MB 9:30-12:30	TAPE-MB 14:00-17:00				Seminar
Week 6 7 Nov			TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-MD 14:30-18:30		TAAO-GS 14:30-18:30				Seminar
Week 7 14 Nov			TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-PP 14:30-18:30	TAPE-MB 9:00-13:00	TAAO-GS 14:30-18:30				Seminar
Week 8 21 Nov			TADG - DA 10:00-12:00	TADG-DA 14:00-16:00	TAALC-PP 14:30-18:30		TAAO-GS 14:30-18:30				Seminar
Week 9 28 Nov			TAPE-IS 9:00-13:00		TAALC-PP 14:30-18:30	TADG-APD 10:00-13:00	TAAO-GS 14:30-18:30	1 Dec	1 Dec		Seminar
Week 10 5 Dec			TAPE-IS 9:00-13:00		TAALC-PP 14:30-18:30	TADG-APD 9:00-13:00 (ol)	TAAO-GS 14:30-18:30	8 Dec	8 Dec		Seminar
Week 11 12 Dec			TAPE-IS 9:00-13:00		TAALC-PP 14:30-18:30	TADG-APD 9:00-13:00 (ol)	TAAO-FF 14:30-18:30				Seminar
Week 12 2 Jan		TAAO-FF 14:30-18:30	TAPE-IS 9:00-13:00		TALC-MEF 14:30-18:30	TADG-APD 10:00-12:30	TADG-APD 14:00-16:30				Seminar
Week 13 9 Jan		TAAO-FF 14:30-18:30	TAPE-IS 9:00-13:00		TALC-MEF 14:30-18:30	TADG-APD 10:00-12:00	TADG-APD 14:00-16:00				Seminar
Week 14 16 Jan		TAAO-FF 14:30-18:30	TAPE-IS 9:00-13:00		TALC-MEF 14:30-18:30	TADG-APD 10:00-12:00	TADG-APD 14:00-16:00				Seminar
Week 15 23 Jan		TAAO-FF 14:30-18:30	TAPE-IS 9:00-13:00		TALC-MEF 14:30-18:30	TADG-APD 10:00-12:00	TADG-APD 14:00-16:00				Seminar

TAAO - LS 14:00-18:00	October 7th	Lab2 DMat
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TADG-DA 14:00-16:00	all Tuesday 14:00-16:00	Lab1 DMat
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All classes, with the exception of TADG-DA-afternoon sessions (Lab1-DMat) and TAAO-LS Oct 7th (Lab2-DMat), will take place at the Seminar Room 3.08 of Department of Mathematics (DMat) at the University of Minho (School of Sciences, Building 6).

TAALC-MD	Advanced Topics in Algebra, Logic and Computation	20h	Manuel Delgado (UP)	mdelgado@fc.up.pt
TAALC-PP	Advanced Topics in Algebra, Logic and Computation	20h	Pedro Patrício (UM)	pedro@math.uminho.pt
TALC-MEF	Advanced Topics in Algebra, Logic and Computation	16h	Maria Elisa Fernandes (UA)	maria.elisa@ua.pt
TAAO-LS	Advanced Topics in Analysis and Optimization	16h	Lisa Santos (UM)	lisa@math.uminho.pt
TAAO-GS	Advanced Topics in Analysis and Optimization	20h	Gueorgui Smirnov (UM)	smirnov@math.uminho.pt
TAAO-FF	Advanced Topics in Analysis and Optimization	20h	Fernando Fontes (UP)	faf@fe.up.pt
TADG-DA	Advanced Topics in Dynamics and Geometry	28h	Davide Azevedo (UM)	davidemsa@math.uminho.pt
TADG-APD	Advanced Topics in Dynamics and Geometry	28h	Ana Paula Dias (UP)	apdias@fc.up.pt
TAPE-MB	Advanced Topics in Probability and Statistics	28h	Margarida Brito (UP)	mabrito@fc.up.pt
TAPE-IS	Advanced Topics in Probability and Statistics	28h	Inês Sousa (UM)	isousa@math.uminho.pt

Specialized Modules in Mathematics and Applications B						
Area	Curricular Unit	Teacher	University	Sem	ECTS	Remarks
Algebra, Logic and Computation	Algebraic Theory of Generalized Inverses	Pedro Patrício	UMinho	Sem 2	3 ECTS	
Algebra, Logic and Computation	Type Theory	José Carlos Espírito Santo	UMinho	Sem 1	6 ECTS	
Algebra, Logic and Computation	Galois Theories	João Xarez	UAveiro	Sem 2	6 ECTS	
Analysis	Differential Equations	José Joaquim Oliveira	UMinho	Sem 2	3 ECTS	
Analysis	Partial Differential Equations	Fernando Miranda	UMinho	Sem 1 Sem 2	6 ECTS	It will run in one semester, only, depending on the preferences of the students
Analysis	Integral Equations and their Generalizations	Manuela Rodrigues	UAveiro	Sem 2	3 ECTS	
Analysis	Topics in Kinetic Theory	Ana Jacinta Soares	UMinho	Sem 2	6 ECTS	
Análise	Topics of Turbulence	Sílvio Gama	UPorto	Sem 2	3 ECTS	
Numerical Analysis and Computational Methods	Numerical Spectral Methods	Sílvio Gama	UPorto	Sem 2	6 ECTS	
Numerical Analysis and Computational Methods	Topics in Numerical Analysis	Irene Falcão	UMinho	Sem 1	3 ECTS	
Control and Optimization	Calculus of Variations	Delfim F. M. Torres	UAveiro	Sem 1	3 ECTS	
Control and Optimization	Codes and Systems	Filipa Santana	UAveiro	Sem 1 Sem 2	3 ECTS	It will run in one semester, only, depending on the preferences of the students
Control and Optimization	Control of Uncertain and Structured Systems	António Pedro Aguiar	UPorto	Sem 2	6 ECTS	
Control and Optimization	Control of Linear Dynamical Systems	Maria Margarida Ferreira Maria do Rosário Pinho Paula Rocha Malonek	UPorto	Sem 2	6 ECTS	
Control and Optimization	Control of Non-Linear Dynamical Systems	António Pedro Aguiar Paula Rocha Malonek	UPorto	Sem 2	6 ECTS	
Dynamics and Geometry	Differential Equations with Symmetry	Manuela Aguiar	UPorto	Sem 1	6 ECTS	
Dynamics and Geometry	Advanced Methods in General Relativity	Maria Piedade Ramos Paulo Maurício	UMinho UPorto	Sem 2	6 ECTS	
Dynamics and Geometry	Algebraic Topology	Lucile Vandembroucq	UMinho	Sem 2	3 ECTS	
Probability and Statistics	Spatial Data Analysis	Raquel Menezes	UMinho	Sem 1	3 ECTS	
Probability and Statistics	Longitudinal Data Analysis	Inês Sousa	UMinho	Sem 2	3 ECTS	
Probability and Statistics	Multivariate Analysis and Statistical Learning	Arminda M. Gonçalves	UMinho	Sem 1	6 ECTS	
Probability and Statistics	Biostatistics	Ana Helena Tavares Ana Rita Gaio Margarida Cardoso Laetitia Teixeira Arminda M. Gonçalves	UAveiro UPorto UPorto UPorto UMinho	Sem 2	3 ECTS	
Probability and Statistics	Generalized Linear Models	Susana Faria	UMinho	Sem 2	3 ECTS	
Probability and Statistics	Signal Processing and Time Series	Sónia Gouveia	UAveiro	Sem 1	6 ECTS	
Probability and Statistics	Stochastic Systems and Applications	Paula Milheiro José Abílio Matos	UPorto	Sem 1	6 ECTS	

Number	Name	Email	Nationality
ECTS >>>>			
Professors >>>>			

Calculus of Variations	Spatial Data Analysis	Topics in Numerical Analysis	Differential equations with symmetry	Multivariate Analysis and Statistical Learning	Stochastic Systems and Applications
3	3	3	6	6	6
DT - UA	RM - UM	MIF - UM	MA-UP	AM - UM	PM+JAM - UP

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3	ID10605	Jhonathan David Barrios Martinez	ID10605@alunos.uminho.pt jhonathanbarrios21@gmail.com	Colombia
4	ID0000	Moisés André Augusto	moisesandreaugusto@gmail.com	Mozambique
5	ID10608	Paulo Jorge da Silva Barbosa	ID10608@alunos.uminho.pt pjbarbosa98@gmail.com	Portugal
6	ID10609	Richard Murdoch Montgomery	ID10609@alunos.uminho.pt montgomery@usp.br	Brazil
7	ID10603	Salah Chaib	ID10603@alunos.uminho.pt salahchaib.math@gmail.com	Algeria
8	ID10610	Tarikul Islam	ID10610@alunos.uminho.pt tarikulamath@gmail.com	Bangladesh
			Number of Students in each UC	

2	2	4	1	5	2

The schedule of each course will be defined by the Professors and the Students following the course.