

mMPG - Computer Graphics and Geometry - (Single degree study, master II. deg., full time form)

Akademický rok: 2023/2024

Študijný odbor: 22. - Mathematics

Garant: doc. RNDr. Andrej Ferko, PhD.

2MPG-A: Obligatory Subjects

Study section / Compulsory courses					
2-MPG-106/22	P	Algorithms and Data Structures - Dana Pardubská	1/W	3C	4kr
2-MPG-108/22	P	Differential Geometry - Pavel Chalmovianský	1/W	3L	4kr
2-MPG-115/10	P	Modelling of Curves and Surfaces (1) - Pavel Chalmovianský , Barbora Pokorná , Martina Bátorová	1/W	2L + 2P	5kr
2-MPG-101/00	P	Computer Graphics (1) - Martina Bátorová , Róbert Bohdal	1/W	2L + 2P	5kr
2-MPG-116/22	P	General Topology - Martin Sleziak , Pavel Chalmovianský	1/W	2L	3kr
2-MPG-125/22	P	Computer Vision - Ľudovít Balko , Andrej Ferko	1/S	2L + 2P	6kr
2-MPG-104/20	P	Algebraic Geometry (1) - Jana Chalmovianská , Martin Mačaj	1/S	3C	5kr
2-MPG-920/00		Diploma Thesis Seminar (1) - Andrej Ferko	1/S	2S	2kr
2-MPG-215/10	P	Modelling of Curves and Surfaces (2) - Pavel Chalmovianský , Barbora Pokorná	1/S	2L + 2P	5kr
2-MPG-102/00	P	Computer Graphics (2) - Róbert Bohdal Prerekvizity: 2-MPG-101/00	1/S	2L + 2P	5kr
2-MPG-117/22	P	Differential geometry and its applications - Pavel Chalmovianský	1/S	3L	5kr
2-MPG-910/00		Diploma Thesis (1) - Andrej Ferko	2/W	6IW	6kr
2-MPG-921/00		Diploma Thesis Seminar (2) - Andrej Ferko	2/W	2S	2kr

2-MPG-201/15	P	Computer Graphics (3) - Andrej Ferko , Adriana Bosáková	2/W	2L + 1P	4kr
2-MPG-203/00	P	Computational Geometry - Pavel Chalmovianský	2/W	4C	5kr
2-MPG-911/00		Diploma Thesis (2) - Andrej Ferko	2/S	10IW	10kr
2-MPG-205/00		Seminar in Computer Physics and Geometry - Andrej Ferko	2/S	2S	2kr

2MPG-B: Obligatory-Optional Subjects

Study section / Compulsory elective courses minimálne 9 kreditov					
2-AIN-223/15		Virtual and Extended Reality - Zuzana Berger Haladová , Martin Madaras , Lukáš Gajdošech	1/W	2L + 2P	6kr
1-MAT-530/15		Numerical Methods of Linear Algebra - Ľudovít Balko , Andrej Ferko Prerekvizity: 1-MAT-270/00	1/S	2L + 2P	5kr
2-MPG-112/22	!	Image Processing and Encoding - Jaroslav Polec	1/S	2L	3kr
2-MPG-243/22		Numerical Mathematics for Graphic Designers - Jela Babušiková , Patrik Mihala	1/S	3L	3kr
2-AIN-204/10		Pattern Recognition - Zuzana Berger Haladová	1/S	2L + 2P	6kr
2-MPG-216/10		Modelling of Curves and Surfaces (3) - Pavel Chalmovianský	2/W	2L	3kr
2-MPG-211/15		Procedural Modelling - Róbert Bohdal	2/W	2C	3kr
2-MPG-217/10		Modelling of Curves and Surfaces (4) - Pavel Chalmovianský	2/S	2L	3kr
2-MPG-218/22	P	Computational Complexity - Dana Pardubská	2/S	3L	5kr

2MPG-C: Electives

Study section / Elective courses					
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2-AIN-222/00		Computer Graphics Applications - Roman Ďurikovič	1/W	2S	3kr
2-MPG-145/15		PC Graphics Devices Architecture - Róbert Bohdal	1/W	2L	3kr
2-MPG-142/00	!	Computer Constructive Geometry - Barbora Pokorná	1/W	2L	3kr
2-MPG-141/00		Projective Geometry - Jana Chalmovianská	1/W	2L	3kr
2-MPG-165/12		Algebraic Geometry Seminar (1) - Pavel Chalmovianský	1/W	2S	2kr
2-MPG-161/12		Numerical Geometry Seminar (1) - Andrej Ferko	1/W	2S	2kr
2-MPG-163/19		Seminar in Pseudo-Euclidean Geometry (1) - Ľudovít Balko , Tomáš Rusin	1, 2/W	2S	2kr
2-AIN-226/22		Deep Learning for Computer Vision - Zuzana Černeková , Viktor Kocur	1, 2/W	2L + 2P	6kr
2-MPG-164/19		Seminar in Pseudo-Euclidean Geometry (2) - Ľudovít Balko , Tomáš Rusin	1, 2/S	2S	2kr
2-MPG-150/15		CAD Systems - Róbert Bohdal	1/S	2C	3kr
2-MPG-149/00	!	Fractal Modelling - Andrej Ferko	1/S	2L	3kr
2-MPG-167/22	!	Data Compression - Jaroslav Polec	1/S	2L	3kr
2-MPG-166/12		Algebraic Geometry Seminar (2) - Pavel Chalmovianský	1/S	2S	2kr
2-MPG-162/12		Numerical Geometry Seminar (2) - Andrej Ferko	1/S	2S	2kr
2-MPG-245/00	!	Digital and Computational Photography - Jaroslav Polec	2/W	2L	3kr
2-MPG-113/15		Approximation and Interpolation Theory - Jela Babušíková	2/W	2C	3kr
2-MPG-247/22		Effective Writing of Professional Texts - Martina Bátorová , Andrej Ferko	2/W	2C	3kr
2-MAT-313/19		Selected Topics of Numerical Algebra - Andrej Ferko , Martin Niepel	2/S	3C	5kr
2-MPG-241/15		Algebraic Geometry (2) - Jana Chalmovianská , Martin Mačaj	2/S	2L	3kr
2-MPG-246/15		Colour Image Processing - Zuzana Černeková	2/S	2L + 2P	6kr

2MPG-SA: State Examination Subjects

State exams / Compulsory courses
Unless determined otherwise by the progame guarantor, a student is permitted to take the state examination only if all previous study requirements have been met.

2-MPG-991/15		Diploma Thesis Defense	/		4kr
2-MPG-953/15		Geometric Modelling	/		6kr
2-MPG-952/15		Computer Graphics	/		6kr