

Faculty of Mathematics and Information Science, Warsaw University of Technology
Post-graduate Program (M.Sc) in Computer Science 2007/2008 (I, II year)

Semester 1

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
Obligatory								
1.	Calculus - Advances	dr J. Spaliński	5	2	2	0	0	E
2.	Nonlinear Systems and Graphic Applications	prof. dr hab. S. Janeczko	3	2	0	1	0	
3.	Advanced Algorithms	prof. dr hab. Z. Lonc	4	2	0	0	1	E
4.	Data Compression	dr hab. I. Herbut	3	2	0	1	0	
5.	Programming Project	dr W. Homenda	5	0	0	0	3	
6.	Institutions of Democracy	dr I. Jackiewicz	2	0	2	0	0	
Total:			22	8	4	2	4	2

Artificial Intelligence

1.	Knowledge Representation and Reasoning	dr A. Radzikowska	5	2	0	2	0	E
2.	Programming in Logic & Symbolic Programming	dr F. Okulicka-Dłużewska	3	1	0	2	0	
Total:			8	3	0	4	0	1

Computing in Science and Engineering

1.	Advanced Numerical Methods	dr K. Twardowska	4	2	0	0	1	
2.	Approximation and Interpolation	prof. dr hab. S. Janeczko	4	2	1	0	0	E
Total:			8	4	1	0	1	1

Computing in Business and Economics

1.	Data Management and Analysis with the SAS System	dr W. Matysiak	5	2	0	2	0	E
2.	Intelligent Data Analysis	prof. dr hab. J. Koronacki	3	2	0	1	0	
Total:			8	4	0	3	0	1

Semester 2

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
Obligatory								
1.	Algorithms & Computability	dr W. Homenda	5	2	0	1	0	E
2.	High Performance Computing 1	dr F. Okulicka-Dłużewska	5	2	0	2	0	
3.	Institutions of the European Union	dr I. Jackiewicz	2	0	2	0	0	
Total:			12	4	2	3	0	1

Artificial Intelligence

1.	Electives		8					
2.	Neural Networks	prof. dr hab. B. Macukow, prof. nzw. dr hab. J. Mańdziuk	5	2	0	2	0	E
3.	Image and Speech Recognition	dr W. Kasprzak	5	2	1	1	0	
Total:			18	4	1	3	0	1

Computing in Science and Engineering

1.	Electives		8					
2.	Math. Modeling in Physics & Techn.	prof. nzw. dr hab. T. Rzeżuchowski	5	2	1	0	1	E
3.	Advanced Simulation Methods in Engineering	prof. dr hab. J. Rokicki	5	2	0	1	1	E
Total:			18	4	1	1	2	2

Computing in Business and Economics

1. Electives		8						
2. Techniques of Survey Sampling	prof. dr hab. J. Wesołowski	6	2	1	0	1	E	
3. Mathematics of Financial Derivatives	dr M. Kociński	4	2	1	0	1	E	
Total:		18	4	2	0	2	2	2

Electives semester 2

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
1.	Differential Equations	prof. nzw. dr hab. A. Fryszkowski	4	2	1	1	0	
2.	Partial Differential Equations	prof. nzw. dr hab. A. Fryszkowski	4	2	1	0	1	
3.	Mathematical Programming	dr E. Pawelec	4	2	1	0	0	
4.	Molecular Computation Systems	dr inż. P. Wąsiewicz	4	2	0	0	1	
5.	Agent-based Computing	dr M. Paprzycki	4	2	0	0	1	
Total:			20	10	3	1	3	0

Semester 3

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
Obligatory								
1.	Distributed Operating Systems	dr hab. E. Niewiadomska-Szynkiewicz	4	2	0	1	0	
2.	Elements of Modern Physics	prof. dr hab. L. Adamowicz (IF)	4	2	1	0	0	
3.	Humanities Seminar	prof. dr hab. S. Janeczko	2	0	2	0	0	
4.	Diploma Seminar	prof. B. Macukow	2	0	2	0	0	
Total:			12	4	5	1	0	

Artificial Intelligence

1. Electives		14						E
2. Software Testing	dr L. Stapp	4	1	1	1	0	E	
Total:		18	1	1	1	0	1	1

Computing in Science and Engineering

1. Electives		14						E
2. Method of Finite Element	dr A. Grabarski, dr F. Okulicka	4	2	0	0	1	E	
Total:		18	2	0	0	1	1	1

Computing in Business and Economics

1. Electives		13						E
2. Risk Theory and Insurance App.		5	2	1	0	1	E	
Total:		18	2	1	0	1	1	1

Electives semester 3

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
1.	Image Reconstruction Algorithms	dr hab. Z. Pasternak-Winiarski	4	2	0	0	2	E
2.	Computer Graphics 3D	dr J. Porter-Sobieraj	4	2	0	2	0	E
3.	Advanced Simulation Methods in Engineering	prof. dr hab. J. Rokicki	5	2	0	1	1	E
4.	Component Programming with J2EE	dr M. Grzenda	4	1	0	2	0	E
5.	Numerical Computing Seminar	tbd	4	0	1	0	1	
Total:			21	7	1	5	4	0

Semester 4

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
Obligatory								
1.	Diploma Seminar		4	0	2	0	0	
2.	MSc Thesis		26	0	0	0	0	
Total:			30	0	2	0	0	0

Electives - Engineering Course Subjects

Electives Winter Semester

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
1.	Parallel and Distributed Programming	dr L. Stapp	4	2	1	0	0	E
2.	.NET Programming	mgr K. Mossakowski	4	2	0	2	0	
3.	Introduction to TCP/IP networks	dr M. Kozłowski	4	1	0	2	0	
4.	Assemblers	prof. nzw. dr hab. T. Adamski	4	2	0	1	0	
5.	Risk Theory	dr Z. Dudek	4	2	1	0	0	E
6.	Data Mining	dr K. Bryś	4	2	0	1	0	
7.	Advanced Artificial Intelligence	dr hab. J. Arabas	4	2	0	0	1	
8.	Oracle Database Programming	mgr R. Maćzewski	4	2	0	0	2	
Total:			32	15	2	6	3	2

Electives Summer Semester

No	Course	Responsible / Lecturer	ECTS	Lc	E	L	P	Exam
1.	Algebra for Computer Science	prof. dr hab. A. Romanowska	4	2	1	0	0	E
2.	Elements of Sampling Theory	prof. nzw. dr hab. P. Szablowski	4	2	1	0	0	E
3.	Oracle Database Administration	mgr R. Maćzewski	4	2	0	0	2	E
4.	Network Operating Systems	dr J. Oleniacz	4	1	0	2	0	
Total:			16	7	2	2	2	3