

List of Courses 2020/2021

Catalog No.	Course	Lecturer	Semester	
			1st	2nd
046002	+ Design and Analysis of Algorithms	Prof. Y. Moses/ Prof. D. Cohen	3	3
046005	+Computer Networks & Internet 2	Prof. Y. Cassuto/ Prof. A. Orda	3	3
046012	Introduction to Organic Materials and Devices	Prof. N. Tessler	3	
046042	INTRODUCTION TO ELECTRIC POWER SYSTEMS and SMART GRIDS	Prof. Y. Levron	3.5	
046055	NanoPhotonics	Assic.Prof. G. Bartal	3	
046187	+ Analog Circuit Design	Mr.R. Elbhar	3	
046188	+ Mixed Signal Electronic Circuits	Dr. C. Jakobson		3
046189	+ Design of Active Networks	Mr .A. Diskin		3
046195	+ Machine Learning	Mr. Omer Yaeir	3.5	3.5
046197	+ Computational Methods	Prof. K. Levi		3
046200	+ Image Processing and Analysis	Prof. I. Cohen/ Assoc. Prof. Y. Schechner	3	3
046201	+ Introduction to Random Signal Processes	Prof. T. Michaeli	3	
046202	+ Data Analysis	Prof. K. Levi	3	
046203	Planning and Reinforcemet Learning	Prof. A. Tamar + Prof. S. Mannor		3
046204	+ Analog Communication	Prof. I. Tal	3	
046205	+ Introduction to Coding Theory in Communication	Prof.Y. Sason		3
046206	+ Introduction to Digital Communication	Distinguished Prof. S. Shamai (Shitz)/ Assoc. Y. Steinberg	3	3
046208	+ Modern Communication Techniques	Prof. N. Vinberger		3
046209	+ Structure of Operating Systems	Prof. S. Bergman/ Dr. I. Eyal	3.5	3.5
046210	+Laboratory in Operating Systems	Faculty active in this field	1 LAB	1 Lab
046211	Deep Learning	Prof. D. Soudry		3

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046212	+ Introduction to Robotics	Prof. A. Tamar		3
046216	+ Microwaves	Prof. A. Epstain		3
046225	+ Physical Principles of Semiconductors	Prof.E. Yalon/Prof. E. Yalon	3	3
046230	Advanced Electron Devices	Prof. D. Ritter		3
046232	Chapters nanoelectronics	Assistant Prof. Y. Yaish		3
046235	+ Integrated Power Management Devices	Prof. D. Ritter		3
046237	+ Integrated Circuits	Mr. E. Maayan/ Mr. E. Maayan	3	3
046239	+ Laboratory Courses in Nano-Electronics	Prof. N. Tessler		3
046240	Superconducting Quantum Devices	Associate Prof. E. Buks		3
046241	+ Quantum Mechanics	Assoc. Prof. E. Buks		3
046242	+ Stat.physics Fluctuations and Noise	Prof.N. Merhav	3	
046243	Quantum Technologies	Prof. I. Kaminer	3	3
046244	+ Side Waves	Prof. E. Buks	3	
046249	+ Electro-Optic Systems	Prof. A. Rosenthal		3
046256	+ Antennae and Radiation	Prof. A. Epstain	3	
046265	+ Advanced Circuits and Architectures	Prof. S. Kvatinsky	3	
046266	+ Compilation Methods	Dr. E. Zaks	3	
046267	+ Computer Architecture	Dr. P. Gabay	3	3
046271	+ Object-Oriented Programming and Design	Mr. Y. Moshe	3	
046272	Distributed Systems: Principles	Prof. I. Keidar	3	
046273	Distributed Functional Programming	Mr .H. Gazit		3
046275	Dinamic Binary Translation Optimization	Mr. G. Haber		3
046277	Correctness Guarantees for Software	Prof. D. Drachsler-Cohen	3	

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046278	Computational Accelerators and Accelerators	Prof. M. Silbershtein		3
046280	Principles and Tools for Computer Security	Prof. I. Eyal	3	
046326	+ Introduction to Biological Signals	Dr. D. Sudri	3	
046332	+ Visual and Auditory Systems	Prof. M. Porat/ Dr. R. Kaftory	3	3
046733	+ Information Theory	Prof. S. Samai/ Prof. N. Merhav	3	3
046745	+ Digital Signal Processing	Prof. G. Gilboa	3	
046746	+ Algorithms and Application	Prof. A. Levin		3
046773	+ Electro-optic Semiconductor Devices-Detectors	Prof. Y. Nemirovsky	3	
046831	+ Introduction to Medical Imaging	Assis. Prof. G. Gilboa		3
046851	+ Semiconductor Lasers and Integrated Photonic Device	Prof. M. Orenstein	3	
046853	+ Advanced Architecture of Micro-Processors' Systems	Prof. U. Weiser	3	
046868	+ Foundations of Stochastic Processes	Prof. R. Atar + Assistant Prof. O. Bobrowski		3
046880	+ CAD of VLSI Systems	Dr. L. Yavitz	3	
046903	+ RF CMOS Integrated Circuits	Prof. E. Cohen		3
046918	+ Physical Design Automation of VLSI Systems	Dr. K. Moiseev		3
046968	+ Micromachining and Micro-electromechanical Systems	Prof. Y. Nemirovsky		3
048000	Computational Photography	Prof. A. Levin	2	
048703	Advanced topics in communication and information theory 1	Prof. Y. Sason		2
048710	Advanced Topics	Prof. I. Goykhman	2	
048712	Electro-optics Laboratory 2	Prof. M. Horowitz	2 Lab	2 Lab
048715	Advanced Topics in systems, learning, Control Theory 1	Prof. N. Shimkin		2
048716	Advanced Topics in systems, learning, Control Theory 2	Prof. N. Vinberger	2	
048717	Advanced topics in Systems Learning Control 3	Prof. K. Levy		2

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048718	Adv. Topics in Sys. Learning , Control	Prof. S. Mannor + Prof. A. Tamar	2	
048719	Adv.topics in Systems Learning , Control	Prof. Y. Romano		2
048747	Laboratory in Biological Systems and Signals	Prof. M. Porat	2 Lab	2 Lab
048750	Advanced Topics in Computer Architecture	Prof. Y. Estion		2
048812	Oxide Physics and Devices	Assistant Prof. L. Kornblum		2
048816	Signal Processing Laboratory	Faculty active in this field	2 Lab	2 Lab
048823	Analytical Methods in Wave Theory 1	Prof. A. Epstain		2
048828	Array Signal Processing and Analysis	Prof. I. Cohen	2	
048836	The Hfic Lab	Assitant Prof. E. cohen	2 Lab	2 Lab
048852	Advanced Energy Conversion Laboratory	Prof. Y. Levron	2 Lab	2 Lab
048860	Work Pictures	Prof.M. Porat		2
048864	Advance Topics in Computer Architecture2	Professor Emeritus R. Ginosar + Dr. L. Yavitz		2
048865	Networks, graphs and signal processing	Prof. R. Talmon, Prof. R. Kimel	2	
048866	Computer Communication Networks 2	Prof. O. Rottenstreich	2	
048877	Hardware and Software Laboratory	Prof. Y. Moses	2 Lab	2 Lab
048879	Seminar in Vlsi Architecture	Prof. S. Kvatinsky		2
048885	Advance Topics in Computer Engineering	Prof Emeritus R. Ginosar + Dr. L. Yavits / Prof. D. Drachsler-Cohen	2	2
048887	Introduction to Departmental Research	Dr. D. Lange		1
048888	Blockchain and Cryptocurrency protocols	Prof. I. Eyal		2
048889	Machine Learning for Computer Networks	Prof. I. Keslassy		2
048908	Selected Topics in Microelectronics 2	Prof. Y. Yaish		2
048922	Vision, Image Structure and Computer Vision Laboratory	Prof. M. Porat	2 Lab	2 Lab
048930	Selected Topics in Electrooptics	Dr I. Kaminer	2	

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048931	Information Measures and Aplications	Prof. I. Sason		2
048933	Communication Laboratory	Prof. s. Shamai	2 Lab	2 Lab

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048934	Coded Communications	Distinguished Prof. S. Shamai (Shitz)	2	
048951	Statistical Models in Optical Comm.	Assoc. Prof. M. Nazarathy		2
048954	Statistical Methods in Image Processing0	Associate Prof. T. Michaeli		2
048961	Selected Topics in Computing 1	Prof. M. Silbershtein	2	
048966	Microelectronics Laboratory	Prof. D. Ritter	2 Lab	2 Lab
048967	Computer Networks Laboratory	Prof. I. Keslassy	2 Lab	2 Lab
048976	Laboratory in Parallel Systems	Prof. I. Birk	2 Lab	2 Lab
048978	Radiation Sources Based on Elect. Beams	Prof. L. Schachter		2
048979	Advanced Topics in probability and random processes	Prof. R. Atar		2
048980	Des. Amd Manag. of Noncooper. Com. Nets.	Prof. A. Orda	2	
048989	Power System Dynamics	Associate Prof. Y. Levron		2
048996	Waves in Periodic Stuctures	Prof. L. Schachter		2
049005	Control Topics Laboratory	Prof.N. Shimkin	2 Lab	2 Lab
049006	Electromagnetic Waves Laboratory	Prof. L. Schachter	2 Lab	2 Lab
049011	Advanced Topics in Computing 2	Prof. I. Keidar		2
049014	Selected Topics in Probability Theory	Assistant Prof. O. Bobrowski		2
049017	Advanced Topics in Computing 3	Prof. A. Mendelson	2	2
049026	Knowledge and Games in Distributed Sys.	Prof. Y. Moses	2	
049027	Multi-User infprmation Theory	Prof .Y. Steinberg		2
049030	Topics in Storage	Assoc. Prof. Y. Birk		2
049031	VLSI Interconnections	Dr. K. Moiseev/Prof. A. Kolodny		2
049033	Generalized Sampling Methods	Prof. Y. Eldar		2
049035	Digital Speech Processing in Noisy Environments	Prof. I. Cohen		2

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049040	Codes on Graphs and Iterative Decoding	Prof. I. Sason	2	
049042	Advanced Photonic Circuitry	Prof. M. Orenstein		2
049044	Lossy Data Compression	Prof. N. Merhav	2	
049050	Advanced Topics in Nano-Electronics 1	Prof. E. Yalon	2	
049053	Machine Learning Laboratory	Faculty active in this field	2 Lab	2 Lab
049056	Shape Analysis	Prof. A. Tal		2
049058	Machine Learning for Complex Problems	Assoc.Prof. K. Crammer		2
049059	Graph Theory with Applications for Computer Engineering	Dr. S. Wimer		2
049061	Polarization Codes	Prof. A. Tal		2
049062	imaging and three-dimensional reconstruction	Assoc. Prof. Y. Schechner	2	
049063	Information Storage Devices	Prof. Y. Cassuto	2	
049064	Variational Methods in Image Processing	Prof. G. Gilboa	2	
108324	Elements of Modern Analysis for Electri.	Prof. N. Crawford	2.5	
108327	Functional Analysis for E.e.	Prof. E. Mayer-Wolf		2.5