

## Technion Autonomous Systems Program - courses

### List A

Points Credit	Course name	faculty	Course no.
2.5	Multidimensional remote sensing	Civil Engineering	018819
3	Processing Image And Signal Processing	Computer science	236327
3	Introduction to Computer Networks	Computer science	236334
3	Distributed Algorithms A	Computer science	236357
3	Introduction to Artificial Intelligence	Computer science	236501
3	Introduction to Machine Learning	Computer science	236756
3	Digital Image Processing	Computer science	236860
3	Computational vision geometrically	Computer science	236861
2	Computer Vision	Computer science	236873
2	Introduction to Robotics	Computer science	236927
3	Introduction to Neural Networks	Computer science	236941
2.5	Kinematics Dynamics and control of robots	Mechanical Engineering	036026
3	Design and navigation robots movement by sensors	Mechanical Engineering	036044

3	kinematics biomechanics and robotics	Mechanical Engineering	036072
3	Hybrid dynamic mechanical systems	Mechanical Engineering	036087
2	Advanced Topics in Robotics	Mechanical engineering	038785
3	Learning and dynamic systems design	Electrical engineering	046194
3	Machine Learning	Electrical engineering	046195
2	Revaluation of dynamical systems identification	Electrical engineering	048825
2	Work Pictures	Electrical engineering	048860
2	Computer Learning solutions to complex problems	Electrical engineering	049058
3	Networked dynamical systems analysis and design	Aerospace Engineering	086730
3	Basic theory of revaluation	Aerospace Engineering	086777
3	Uses computer vision navigation	Aerospace Engineering	086761
2.5	Design and programming robots work	Industrial Engineering and Management	097163
3.5	Fundamentals and applications of artificial intelligence	Industrial Engineering and Management	096210

**List B**

Points Credit	Course name	faculty	Course .no
2.5	Inertial Navigation Systems	Civil Engineering	016832
3	Control Systems	Civil Engineering	017003
3	Control Systems Design	Civil Engineering	017004
2.5	Selected Topics vehicle dynamics	Civil Engineering	017010
2	Advanced Methods images acquisition	Civil Engineering	018818
2	Inertial Systems Advanced Applications	Civil Engineering	018827
3	Digital Geometry Processing	Computer science	236329
3	Computer Communication Project	Computer science	236340
3	Distributed Systems	Computer science	236351
2	Advanced Topics in Distributed Algorithms	Computer science	236358
3	Project parallel and distributed programming	Computer science	236371
3	Advanced Topics in Computer Vision and Image Processing L + Z	Computer science	236627
3	Advanced Topics in Robotics E + Z	Computer science	236643
3	Intelligent Systems Project	Computer	236754

		science	
2	Seminar in processing images	Computer science	236821
2	Seminar in robotics	Computer science	236824
3	Computer Vision Project	Computer science	236874
3	Visual identification	Computer science	236875
3	linear control systems	Mechanical Engineering	036012
3	Process Optimization	Mechanical Engineering	036013
2.5	Computational geometry and CAD models 1	Mechanical Engineering	036020
3	Control structures and mechanical systems	Mechanical Engineering	036039
3	Analysis of nonlinear vibration	Mechanical Engineering	036048
2.5	Neural networks for control and diagnostics	Mechanical engineering	036049
3	Control Systems nonlinear	Mechanical Engineering	036050
3	Gap methods for assessing risk and reliability	Mechanical Engineering	036057
3	Control and robust enough to approach Hminmks guidance	Mechanical Engineering	038781
3	Introduction to chaotic dynamical systems	Mechanical Engineering	038786
3	Pauses control and valuation	Mechanical Engineering	038806
3	Advanced issues in teaching design and manufacturing	Education in Science and	216144

		Technology	
2.5	Ultrasound in Medicine - Principles and implementing three	Biomedical Engineering	336325
3	Introduction to control biomedical systems	Biomedical Engineering	336522
2.5	Principles of Medical Imaging	Biomedical Engineering	336502
3	Nonlinear control	Electrical Engineering	046196
3	Optimizing computational methods	Electrical Engineering	046197
3	Processing and Analysis of Images	Electrical Engineering	046200
3	Distributed Systems: Principles	Electrical Engineering	046272
3	Information Theory	Electrical Engineering	046733
3	Algorithms and computer vision applications	Electrical Engineering	046746
3	Foundations of random processes	Electrical Engineering	046868
2	Modern design of control systems	Electrical Engineering	048912
3	Analysis of embedded systems and indocrinated	Aerospace Engineering	086222
3	Many systems control input and output	Aerospace Engineering	086289
3	Control tracks satellites	Aerospace Engineering	086290
3	Principles of guidance and homing	Aerospace Engineering	086760
3	Aeronautical systems optimal control 1	Aerospace Engineering	088751

3	Automatic control of the aircraft	Aerospace Engineering	086755
3	Navigate and guidance systems	Aerospace Engineering	086759
2	Rocket landed	Aerospace Engineering	088211
3	Advanced Topics guided by missiles	Aerospace Engineering	088759
3	Distributed Space Systems	Aerospace Engineering	088900
3.5	Artificial intelligence and autonomous systems	Industrial Engineering and Management	096208
2.5	Artificial intelligence and non- distributed environments uncertain	Industrial Engineering and Management	097210
2.5	Cooperative game theory	Industrial Engineering and Management	097317

**List C**

Points Credit	Course name	faculty	Course no.
3	The mathematical foundations for engineers	Civil Engineering	019001
3	Numerical Methods for Engineers	Civil Engineering	019003
3	Selected topics in statistics	Civil Engineering	019007
2	Spares sparse representations and their applications to signal and image processing	Computer science	236862
4	Analytical Methods in Mechanical Engineering 1	Mechanical Engineering	036001
3	Applied Aeronautical Engineering Mathematics 1	Aerospace Engineering	88103
3.5	Non-linear models in Operations Research	Industrial Engineering and Management	096327
3.5	Non-cooperative games	Industrial Engineering and Management	096575
3.5	Optimization 1	Industrial Engineering and Management	098311
3.5	Stochastic Processes	Industrial Engineering and Management	098413

3	Game Theory	Mathematics	106173
3	Matrix theory	Mathematics	106393
2.5	Functional Analysis of Electrical Engineering	Mathematics	108327