Technion Autonomous Systems Program - courses

List A

Points Credit	Course name	faculty	Course no.
2.5	Multi-Dimensional Remote Sensing	Civil Engineering	018819
4	Signal Image and Data Processing	Computer science	236200
3	Introduction to Computer Networks	Computer science	236334
3	Introduction to Artificial Intelligence	Computer science	236501
3	Introduction to Machine Learning	Computer science	236756
3	Digital Image Processing	Computer science	236860
3	Geometric Computer Vision	Computer science	236861
3	Sparse and Redundant Representations	Computer science	236862
3	Computer Vision	Computer science	236873
3	Introduction to Robotics	Computer science	236927
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	036087

		Engineering	
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	Image Processing (listed as Work Picture)	Electrical Engineering	048860
2	Computer Learning Solutions to Complex Problems	Electrical Engineering	049058
3	Networked Dynamical Systems Analysis and Design	Aerospace Engineering	086730
3	Navigational Uses Computer Vision	Aerospace Engineering	086761
3	Navigation and Autonomous Sensing World	Aerospace Engineering	086762
3	Basic Theory of Revaluation	Aerospace Engineering	086777
3.5	Fundamentals and Applications of Artificial Intelligence	Industrial Engineering and Management	096210
3.5	Deep Learning, Theory and Practice	Industrial Engineering and Management	097200
3.5	Cognitive Robots	deep learning, theory and practice	097244

List B

Points Credit	Course name	faculty	Course .no
2.5	Navigation and Inertial Systems	Civil Engineering	016832
3	Systems and Control	Civil Engineering	017003
3	Design of Control Systems	Civil Engineering	017004
2.5	Selected Subjects in Vehicle Dynamics	Civil Engineering	017010
2	Advanced Image Acquisition Methods	Civil Engineering	018818
2	.Advanced Application of Navigation Sys	Civil Engineering	018827
3	Digital Geometry Processing	Computer Science	236329
3	Project in Computer Communication	Computer Science	236340
3	Distributed Systems	Computer Science	236351
2	Advanced Topics in Distributed Algorithm	Computer Science	236358
3	Pro. in Parallel/distributed Programming	Computer Science	236371
3	Advanced Topics in Comp. Vision	Computer Science	236627
3	Advanced Topics in Robotics	Computer Science	236643
3	Project in Intelligent Systems	Computer Science	236754
3	Deep Learning on Computation Accelerators	Computer	236781

		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 Vibrations	Mechanical Engineering	036048
2.5	Neural Networks for Control/diagnostic	Mechanical Engineering	036049
3	Nonlinear Control Systems	Mechanical Engineering	036050
3	Info-Gap Methods in Analysis of Risk and Reliability	Mechanical Engineering	036057
3	Traffic Control in Biological Systems	Mechanical Engineering	036092
3	Robust Guidance and Control Via Min-Max	Mechanical Engineering	038781
3	Introduction to Chaotic Dynamical Systems	Mechanical Engineering	038786
3	Time-Delays in Control and Estimation	Mechanical Engineering	038806

3	Advanced issues in teaching design and manufacturing	Education in Science and Technology	216144
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 indoctrinated	Aerospace Engineering	086222
3	Many systems control input and output	Aerospace Engineering	086289
3	Control tracks satellites	Aerospace Engineering	086290
3	random processes in aerospace	Aerospace Engineering	086733

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
3	Internet of things: technologies	Industrial Engineering and Management	097247
2.5	Cooperative game theory	Industrial Engineering and Management	097317

List C

Points Credit	Course name	faculty	Course no.
3	Fundamental Mathematics for Engineers	Civil Engineering	019001
3	Numerical Methods in Engineering	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	Reinforcement Learning	Electrical Engineering	046203
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	098413

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