

3. アナトリア工業高校の時間表の1例

1日は朝7時40分より17時35分までの12校時であり、1校時は40分授業である。

学年	校時	月	火	水	木	金
基礎課程	1	外国語	外国語	トルコ語	外国語	機械実習
	2	外国語	外国語	トルコ語	外国語	機械実習
	3	外国語	外国語	外国語	外国語	機械実習
	4	外国語	外国語	外国語	外国語	機械実習
	5	トルコ語	外国語	外国語	技術製図	機械実習
	6	トルコ語	外国語	外国語	技術製図	機械実習
	7	体育	外国語	外国語		機械実習
	8	体育	外国語	外国語		機械実習
	9		道徳	外国語		機械実習
	10			外国語		機械実習
	11					
	12					
9年生	1	数学	電気実習	トルコ語と文学	歴史	化学
	2	数学	電気実習	トルコ語と文学	歴史	化学

	3	歴史	外国語と文学	数学	電子実習	外国語	
	4	宗教文化と倫理	外国語と文学	数学	電子実習	外国語	
	5	外国語	物理	地理	電子実習	生物と衛生	
	6	外国語	物理	地理	外国語	生物と衛生	
	7	電気実習		機械実習	外国語		
	8	電気実習		機械実習			
	9	電気実習		機械実習			
	10	職業製図		機械実習			
	11	職業製図		道徳			
	12						
	10 年 生	1	電子実習	数学	電気実習		
		2	電子実習	数学	電気実習		
3		電子実習	数学	電気実習	化学		
4		電子実習	物理	電気実習	化学		
5		物理	外国語と文学	職業製図	デジタル電子技術	外国語	
6		物理	外国語と文学	職業製図	デジタル電子技術	外国語	
7		選択	電子実習	選択	空気圧実習	外国語	
8		選択	電子実習	選択	空気圧実習	外国語	
9		生物と衛生	電子実習	国家安全	空気圧実習	選択	
10		生物と衛生	電子実習	選択	空気圧実習	選択	
11			道徳	宗教文化と倫理			
12							
11	1	外国歴史とアチルル	外国歴史とアチルル	デジタル電子技術	空気圧実習	外国語	

年 生						
	2	物理	数学	デジタル電子技術	空気圧実習	外国語
	3	外国語と文学	マイコン技術実習	デジタル電子技術実習	空気圧実習	化学
	4	外国語と文学	マイコン技術実習	デジタル電子技術実習	空気圧実習	化学
	5	数学	マイコン技術実習	物理	空気圧実習	哲学
	6	数学	マイコン技術実習	物理	空気圧実習	哲学
	7	油圧実習	職業製図	化学	選択	
	8	油圧実習	職業製図	化学	選択	
	9	油圧実習	生物と衛生	生物と衛生	外国語	
	10	油圧実習	生物と衛生	宗教文化と倫理	外国語	
	11	道徳				
	12					
12 年 生	1	油圧実習	CAD実習	外国語		自動制御実習
	2	油圧実習	CAD実習	外国語		自動制御実習
	3	PLC,サーボ技術実習	PLC,サーボ技術実習	化学		自動制御実習
	4	PLC,サーボ技術実習	PLC,サーボ技術実習	化学		自動制御実習
	5	PLC,サーボ技術実習	PLC,サーボ技術実習	物理	外国語	自動制御実習
	6	PLC,サーボ技術実習	PLC,サーボ技術実習	物理	外国語	自動制御実習
	7	マイコン技術実習	幾何学	数学	マイコン技術実習	自動制御実習

	習			習	
8	マシン技術実習	幾何学	数学	マシン技術実習	自動制御実習
9	マシン技術実習	数学	幾何学	マシン技術実習	自動制御実習
10	マシン技術実習	進路ガイダンス		マシン技術実習	自動制御実習
11				道德	
12					

4. LIST OF STANDARD EQUIPMENT FOR AUTOMATIC CONTROL DEPARTMENT

NO	ITEM	UNIT PRICE(S)	NUM BER	TOTAL PRICE (\$)
1	Universal Basic Digital Electronic Training Kit	2.175	5	10.875
2	Basic Digital Electronic Student Training Kit	1.620	13	21.060
3	Advanced Digital Electronic Mounting Board	1.090	15	16.350
4	Microprocessor Programming Unit	2.175	13	28.275
5	Power Supply	165	13	2.145
6	Universal Teacher Experiment Cart	195	4	780
7	Laboratory Bench	110	13	1.430

8	Digital Multi meter	270	13	3.510
9	Function Generator	270	5	1.350
10	Frequency-meter	270	5	1.350
11	Oscilloscope (Teacher's)	2.175	2	4.350
12	Oscilloscope (Student's)	2.175	12	26.100
13	Analogue Multi meter	110	10	1.100
14	Analogue Watt meter	325	5	1.625
15	Function Generator & Counter	435	5	2.175
16	Basic Electron-technic Student Kit	870	10	8.700
17	Basic Electronic Student Kit	650	10	6.500
18	Electro-technic Training Kit	3.800	5	19.000
19	Electronic Training Kit	1.090	5	5.450
20	Three-phase Electrical Generator Training Kit	1.090	5	5.450
21	Power Electronic Training Kit	1.630	5	8.150
22	Sensor Training Kit	1.435	6	8.610
23	Left-scale Universal Multi meter	435	6	2.610
24	Center-scale Universal Multi meter	435	2	870
25	Electronic RMS Testing Multi meter	520	2	1.040
26	Electronic Three-phase Generator	435	2	870
27	Universal Transformer Experiment Panel	350	2	700
28	Electric Safety Demonstration Kit	980	2	1.960
29	Universal Electro-technic /Electronic Student Bench	1.740	2	3.480
30	PID Training Kit	610	2	1.220
31	Student's Electrical System Application Bench & Kit	1.220	13	15.860
32	Liminous Drawing Table	85	2	170
33	Exposure Device	175	2	350
34	Foaming Acid Bed and Protective Set (Vertical)	260	2	520
35	High-cycle Plaque Drill	175	2	350
36	Soldering	130	13	1.690
37	Stool	22	24	528
38	Compressor	780	2	1.560
39	Universal Pneumatic-hydraulic Experiment Cart	5.220	13	67.860
40	Pneumatic Circuit Elements Kit	5.825	13	75.725
41	Hydraulic Circuit Elements Kit	4.350	13	56.550

42	Electro pneumatic–elector hydraulicCircuit Elements Kit	6.520	13	84.760
43	Cord and HydraulicSuspension Truck	175	13	2.275
44	Pneumatic–hydraulic magnetic symbol set	130	2	260
45	Electro pneumatic–elector hydraulic magnetic symbol set	130	2	260
46	Colored transparent set	650	2	1.300
47	Werzalit Laboratory Bench	130	24	3.120
48	Wheeled Laboratory Bench	195	13	2.535
49	Computer	1.090	13	14.170
50	PLC Training Kit	4.350	13	56.550
51	Technical Drawing Table	85	24	2.040
52	Plain Table	35	24	840
53	Drawing Kit	25	24	600
54	Overhead Projector	870	6	5.220
55	White Board	110	4	440
56	Magnetic White Board	240	2	480
57	Tool Cabinet	100	28	2.800
58	Werzalit Chair	25	26	3.150
59	Teachers Table	65		390
TOTAL PRICE (\$)				599.438

5. 自動制御科の各科目の詳細

Lesson : WORK SHOP		Class: IX
ChapterNO	Chapter	
1	Electricity Workshop	
2	Conductors	
3	Single veined conductors and application	
4	Conductors in energy technique	
5	Electric installations	
6	Soldering technique	
7	Private circuit assembly	
8	Circuit boards	
9	Manufacturing private circuit boxes	

5 Lesson : ELECTRONIC AND LABORATORY		Class:IX
ChapterNO	Chapter	
1	Graphical drawings	
2	Voltage and current types	
3	Oscilloscopes	
4	Resistance color codes and sorts	
5	Private conductors	
6	Semiconductors	
7	Redressers	
8	Zener diodes	
9	Bipolar transistors	
10	Transistor characteristics and basic circuits	

Lesson : ELECTRO TECHNIQUE AND LABORATORY		Class:IX
ChapterNO	Chapter	
1	Introduction the electricity	
2	Basic sizes in the electrical circuits	
3	Production of electricity	
4	Measuring current and voltage in the basic electrical circuits	
5	Effects of electrical current	
6	Main electrical laws	
7	Resistance connections	
8	Application fields of resisted circuits	
9	Physical connections of resist of conductor	

10	Work and power
11	Measuring methods of resist
12	Voltage sources and specifications
13	Electrical area
14	Condensers
15	Magnetism
16	Induction and kernel induction
17	Winding in direct current

1 Lesson : VOCATIONAL DRAWING		Class:IX
ChapterNO	Chapter	
1	Electrical drawing types	
2	Drawing electrical circuits which is suitable electrical standards	
3	Drawing and analyzing of function schemes	
4	Electronic circuits	

9 Lesson : DIGITAL ELECTRONICS AND LABORATORY		Class:X
ChapterNO	Chapter	
1	Signal types	
2	Digit systems	
3	Logic ports	
4	Boolean ports	
5	Basic logic circuits	
6	Simplification functions of logic circuit functions	
7	Main memory circuits	
8	Counters	
9	Registers	

Lesson : ELECTRONIC AND LABORATORY		Class:X
ChapterNO	Chapter	
1	Amplifiers which produced with transistors	
2	Fet transistors	
3	Ujt transistors	
4	Tristor diac and triacs	
5	Tristor circuits	
6	Tristor in DC circuit	

7	Operational amplifiers
8	Application of transistor as key element

Lesson : ELECTRO TECHNIQUE AND LABORATORY		Class: X
Chapter NO	Chapter	
1	Resistance concepts in alternative current	
2	RL RC and RLC serial circuits	
3	RL RC and RLC parallel circuits	
4	Power on alternative current circuits	
5	RLC resonance circuits	
6	Three phase systems	
7	Correction of power factor	
8	Measuring work in electricity	
9	Energy lines	
10	Transformers	
11	Direct current machines	
12	Alternative current machines	
13	Electrical equipment's	

Lesson : VOCATIONAL DRAWING		Class: X
Chapter NO	Chapter	
1	Characteristic curves of semi conductors	
2	Drawing basic electronic circuits and circuit boards technique	
3	Analyze of electronic circuit schemes	
4	Drawing and analyzing of electrical systems	
5	Commands with contractors	
6	Digital electronic circuits	

Lesson : PNEUMATIC AND LABORATORY		Class: X
Chapter NO	Chapter	
1	Main concepts of command technique	
2	Main principles of pneumatic command	
3	Pneumatic instruments and basic circuits	
4	Indirect command	
5	Pneumatic command samples	
6	Extra conditions on command	

Lesson : DIGITAL ELECTRONICS AND LABORATORY		Class: X I
Chapter NO	Chapter	
1	Counters	
2	Arithmetical circuits	
3	Registers	
4	Codes	
5	Bus (Line) systems	
6	Memory element	
7	Converters and data selectors	
8	Logic area (PAL PLA)	
9	Transmission	
10	Structure of micro processors	

Lesson : HYDRAULIC AND LABORATORY		Class: X I
Chapter NO	Chapter	
1	Hydraulic command technique and fundamentals	
2	Hydraulic instruments and functions	
3	Main circuit on the Hydraulic test set	

Lesson : VOCATIONAL DRAWING		Class: X I
Chapter NO	Chapter	
1	Drawing pneumatic and hydraulic element symbols with DIN/ISO 1219	
2	Making reading and analyzing of pneumatic circuit schemes	
3	Differences of between the pneumatic and Hydraulic schemes	
4	Working with the line-step and function diagrams	
5	Comparing the pneumatic and electrical elements	
6	Showing electro pneumatic elements with standards	
7	Showing reading and analyzing electro pneumatic circuits	

Lesson : MICROPROCESSORS AND LABORATORY		Class: X I
Chapter NO	Chapter	
1	Digit systems	
2	Expression of information with bit	
3	Microprocessor systems	
4	8085 command list basic programs with assembler and machine	

	language
5	Interrupt and restart
6	Addressing types
7	8080/8085 8086/8088 and 80286/80386 type microprocessors

Lesson : PNEUMATIC AND LABORATORY		Class: X I
Chapter NO	Chapter	
1	Cascade method	
2	Improving stepper module circuit schemes	
3	Contactors and relays	
4	Electromagnet warning valves	
5	Button keys	
6	Electrical command circuits and showing symbols with DIN40713	
7	Obtain circuit schemes	
8	Showing electro pneumatic basic circuits with open schemes	
9	Transducers	
10	Output and power circuits	
11	Homework and project applications	

Lesson : CAD APPLICATIONS		Class: X II
Chapter NO	Chapter	
1	Specifications of package programs	
2	CAD discs and function program	
3	CAD drawing packages	
4	CAD and coordinate systems	
5	Drawing machine elements with CAD program	

Lesson : HYDRAULIC AND LABORATORY		Class: X II
Chapter NO	Chapter	
1	Electro hydraulic basic circuits	
2	Using electro hydraulic command	
3	Using proportional and servo hydraulic	

Lesson : MICROPROCESSORS AND LABORATORY		Class: X II
Chapter NO	Chapter	
1	8080/8085 system	
2	Hardware configuration	
3	Advanced level programming languages	
4	Advanced level programming languages and assembler code	

Lesson : AUTOMATIC COMMAND AND LABORATORY		Class: X II
Chapter NO	Chapter	
1	Measuring the sizes of non-electrical	
2	Introduction to automation technique	
3	Commands	
4	Settings	
5	Hand command and self setter	
6	Introduction of transfer elements	
7	Setting on two points of one PTL setting unit	
8	Setting units (Unbalanced)	
9	Setters	
10	Basic structure of signal flow charts	
11	Structural circuits in setting technique	
12	Statically and dynamically behavior of control cycles	

Lesson : PLC-MPS-SERVO PNEUMATIC		Class: X II
Chapter NO	Chapter	
1	Open effect command hardware program memory programmed command	
2	Function units of AG Running a command within PLC structure showing the structure of step 5(OB and PB) AWL FUP KOP programming	
3	Control circuits with memory elements	
4	Definition of a signal gradient points time functions(SI SV SE SA)	
5	Position graphic for memory elemented control circuits converting position graphics to a program	
6	Position graphic which appicated on OL/T commands	
7	Digit and comparing functions	
8	Binary command technique	
9	F3XX function structural elements specifications extra specifications	
10	Application of analog value	
11	Digital setters	
12	Safety specifications	
13	Servo pneumatic	
14	MPS	