

08 Study Plan or Curricular Overview for Electrical Engineering and Automation

This part presents the eight-semester curriculum arrangement for the major of Electrical Engineering and Automation at Changchun Institute of

Order Number	Curriculum System	Course Category	Course Code	Course Title	Type	Contact Credit	Total Hours	Teach Class	Practice	ECTS Credit	Self Study Hour	Total class hours	School Begin
1	obligatory	liberal education	my01031010	Ideology Moral Cultivation and Legal Basis	Lecture	3.0	48	40	8	3.0	42	90	I
2	obligatory	liberal education	my02051010	Conspectus of Modern Chinese History	Lecture	3.0	48	40	8	3.0	42	90	I
3	obligator	liberal education	my05011011-8	Situation and Policy	Lecture	0.25	8	7	1	0.25	0	8	I
4	obligator	liberal education	wy01011011-2	College English	Lecture	4.0	64	64		4.0	56	120	I
5	obligatory	liberal education	ty01011011-4	College Physical Education and Health	Lecture	0.5	32	32		1.0	0	32	I
6	obligator	liberal education	ty04011010	Military Theory	Lecture	1.0	36	36		1.0	0	36	I
7	obligatory	liberal education	xl01011010	Mental Health Education For College Students	Lecture	2.0	32	24	8	2.0	28	60	I
8	obligatory	liberal education	my04031020	Learning to Build Dreams Elective Course	Lecture	1.0	16	16		1.0	14	30	I
9	obligatory	natural science courses	lx01011011	Advanced Mathematics I	Lecture	5.0	80	80		5.0	70	150	I
10	obligatory	natural science courses	sh06321010	Introduction to Environmental Science	Lecture	1.0	16	16		1.0	14	30	I
11	obligator	concentrated	ty04601010	Military skills	Practice	1.0	120		120	4.0	0	120	I
Total						21.75	500	355	145	25.25	266	766	
12	obligator	liberal education	my05011012	Situation and Policy	Lecture	0.25	8	7	1	0.25	0	8	II
13	obligator	liberal education	wy01011012	College English II	Lecture	4.0	64	64		4.0	56	120	II
14	obligatory	liberal education	ty01011012	College Physical Education and Health I	Lecture	0.5	32	32		1.0	0	32	II
15	obligator	liberal education	lg05201020	Big data and artificial intelligence	Lecture	1.0	16	10	6	1.0	14	30	II
16	elective	liberal education	my02031020	History of the Communist Party of China	Lecture	1.0	16	16		1.0	14	30	II
17	elective	liberal education	my02041020	History of New China									
18	elective	liberal education	my04051020	History of Reform and Opening-									
19	elective	liberal education	my03031020	History of Socialist Development									
20	obligatory	liberal education	dq02281021	Career Guidance and Career Planning for College Students I	Lecture	0.5	18	18		1.0	12	30	II
21	obligatory	natural science courses	lx01011011-2	Advanced Mathematics	Lecture	5.0	80	80		5.0	70	150	II
22	obligatory	natural science courses	lx02022010	Linear Algebra	Lecture	2.5	40	40		2.5	35	75	II
23	obligatory	natural science courses	lx03022010	College Physics Experiment II	Lecture	2.0	32		32	2.0	28	60	II
24	obligatory	natural science courses	lx03011011	College Physics I	Lecture	3.0	48	48		3.0	42	90	II
25	obligatory	engineering foundation	lg05021010	Fundamentals of Computer Programming (C Language)	Lecture	3.0	48	24	24	3.0	42	90	II
26	obligatory	engineering foundation	jd01202010	Engineering Drawing	Lecture	2.5	40	40		2.5	35	75	II
27	obligator	liberal education	gj01021010	Writing and Communication	Lecture	1.0	16	16		1.0	14	30	II
28	obligatory	concentrated practice	lg04601010	The practice of University Computer Foundation	Practice	1.0	20		20	1.5	25	45	II
Total						27.25	478	395	83	28.75	387	865	
29	obligator	liberal education	my03041010	Fundamentals of Marxism	Lecture	3.0	48	40	8	3.0	42	90	III
30	obligator	liberal education	my05011013	Current Situation and Policies	Lecture	0.25	8	7	1	0.25	0	8	III
31	obligator	liberal education	ty01011013	Current Situation and Policies	Lecture	0.5	32	32		1.0	0	32	III
32	obligator	liberal education	sc01021020	Innovative Methods and	Lecture	1.5	24	24		1.5	21	45	III

33	obligatory	natural science courses	lx02032010	Probability theory and mathematical statistics I	Lecture	3.0	48	48		3.0	42	90	III
34	obligatory	natural science courses	lx03011011-2	College Physics I	Lecture	3.0	48	48		3.0	42	90	III
35	obligatory	natural science courses	lx02042010	Complex function	Lecture	2.5	40	40		2.5	35	75	III
36	obligatory	engineering foundation	dq01021010	Electric Circuit Theory	Lecture	5.0	80	64	16	7.5	145	225	III
37	obligator	liberal education	my03051010	Engineering Ethics	Lecture	1.0	16	16		1.0	14	30	III
38	obligatory	professional foundation	dq02101010	Introduction To Electrical Engineering	Lecture	1.5	24	25		2.0	36	60	III
39	obligatory	liberal education	ys06021010	Appreciation of excellent design works	Lecture	2.0	32	32		2.0	28	60	III
40	obligator	concentrated	dq02601010	Professional Cognition Practice	Practice	1.0	20		20	1.5	25	45	III
41	obligator	concentrated	dq01621010	Circuit Training	Practice	1.0	20		20	1.5	25	45	III
Total						25.25	440	376	65	29.75	455	895	
42	obligatory	liberal education	my04212010	Introduction to Mao Zedong Thought and the Theoretical System of Socialism with Chinese Characteristics	Lecture	3.0	48	40	8	3.0	42	90	IV
43	obligator	liberal education	my05011014	Current Situation and Policies	Lecture	0.25	8	7	1	0.25	0	8	IV
44	obligatory	liberal education	ty01011014	College Physical Education and Health	Lecture	0.5	32	32		1.0	0	32	IV
45	obligator	liberal education	sc01011020	Entrepreneurship foundation	Lecture	1.5	24	24		1.5	21	45	IV
46	obligatory	engineering foundation	dq01031010	Simulate electronic technology	Lecture	3.5	56	46	10	5.0	94	150	IV
47	obligatory	engineering foundation	dq04191010	Signal Analysis and Processing	Lecture	2.0	32	32	0	2.0	28	60	IV
48	obligatory	professional foundation	dq03013010	Principles of Automatic Control	Lecture	2.5	40	34	6	3.5	65	105	IV
49	obligatory	engineering foundation	lx03032010	Electromagnetic Field	Lecture	2.0	32	32		3.0	58	90	IV
50	obligatory	professional foundation	dq02014010	Theory of Electrical Machine	Lecture	4.0	64	60	4	6.0	116	180	IV
51	obligatory	concentrated practice	dq01611010	Electronics Technology Practical Training	Practice	2.0	40		40	3.0	50	90	IV
52	obligator	concentrated	gx00611010	Engineering training	Practice	1.0	20		20	1.5	25	45	IV
Total						22.25	396	307	89	29.75	499	895	
53	obligatory	liberal education	my04011010	Introduction to Xi Jinping Thought on Socialism with Chinese	Lecture	3.0	48	32	16	3.0	42	90	V
54	obligator	liberal education	my05011015	Current Situation and Policies	Lecture	0.25	8	7	1	0.25	0	8	V
55	obligatory	engineering foundation	dq01041010	Digital Electronic Technology	Lecture	3.0	48	40	8	4.0	72	120	V
56	obligator	specialized course	dq03074010	PLC Principle and Application	Lecture	2.0	32	26	6	3.0	58	90	V
57	obligator	specialized course	dq02291010	Electricity Market	Lecture	1.0	16	16		1.5	29	45	V
58	obligatory	professional foundation	dq03051010	Foundation and Application of Microcontroller	Lecture	2.5	40	34	6	2.5	35	75	V
59	obligatory	professional foundation	dq02022010	Power System Analysis	Lecture	4.5	72	72		6.5	123	195	V
60	obligatory	professional foundation	dq03035010	Power Electronics Technology	Lecture	3.0	48	42	6	4.5	87	135	V
61	obligator	concentrated	dq02621010	Design of Power System Analysis	Practice	2.0	32		32	3.0	58	90	V
62	obligator	concentrated	xy01631010	Labor Education and Practice	Practice	1.0	32		32	1.0	0	32	V
Total						22.25	376	269	107	29.25	504	880	
63	obligator	liberal education	my05011016	Current Situation and Policies	Lecture	0.25	8	7	1	0.25	0	8	VI

64	obligatory	liberal education	dq02281022	II Career Guidance and Career Planning for College Students II	Lecture	0.5	20	20		1.0	10	30	VI
65	obligatory	specialized course	dq02034010	Power System Protective	Lecture	3.5	56	56		5.5	109	165	VI
66	obligatory	specialized course	dq02062010	Power Plant Electrical	Lecture	3.0	48	48		4.5	87	135	VI
67	obligatory	specialized course	dq02042010	High Voltage Technique	Lecture	3.0	48	48		4.5	87	135	VI
68	elective	Specialised Courses	dq02051020	Automation of Electric Power Systems	Lecture	1.5	24	24		2.0	36	60	VI
69	elective	Specialised Courses	dq02321020	Power System Fault Analysis	Lecture	1.5	24	24		2.0	36	60	VI
70	elective	Specialised Courses	dq02331020	Special Topic on New Technologies in Electrical	Lecture	1.0	16	16		1.5	29	45	VI
71	elective	Specialised Courses	dq02341020	New Energy Generation and Comprehensive Utilization of Energy	Lecture	1.0	16	16		1.5	29	45	VI
72	obligatory	Specialised Courses	dq02901010	Power Technology Economics and Management	Lecture	1.5	24	24		2.0	36	60	VI
73	obligatory	concentrated practice	dq03602010	Practice of Single Chip Microcomputer Application Technology	Practice	2.0	40		40	3.0	50	90	VI
74	obligatory	concentrated	dq03913010	Course Design of Power	Practice	1.0	16		16	1.5	29	45	VI
Total						19.75	340	283	57	29.25	538	878	
75	obligatory	concentrated practice	dq02631010	Electrical course Design of Power System Protective Relaying	Practice	1.0	16		16	1.5	29	45	VII
76	obligatory	concentrated	dq03624010	Practice of PLC Control System	Practice	2.0	40		40	3.0	50	90	VII
77	obligatory	concentrated	dq02651010	Power System Simulation	Practice	2.0	40		40	3.0	50	90	VII
78	obligatory	concentrated practice	dq02611010	Design of Electrical Engineering Course for Power Plant	Practice	2.0	32		32	3.0	58	90	VII
79	obligatory	concentrated	dq02761010	Training for Specialized English	Practice	1.0	20		20	1.5	25	45	VII
80	obligatory	concentrated practice	dq02731010	Comprehensive Training of Power System Relay Protection	Practice	2.0	40		40	3.0	50	90	VII
81	obligatory	concentrated practice	dq02741010	Comprehensive experiment of high voltage technology	Practice	1.0	20		20	1.5	25	45	VII
82	obligatory	concentrated practice	dq08661010	Training of Electric Power Industry Safety Code	Practice	1.0	20		20	1.5	25	45	VII
83	obligatory	concentrated	dq02681010	Electrical Production Practice	Practice	3.0	60		60	4.5	75	135	VII
84	obligatory	concentrated practice	dq02751010	Matlab electrical engineering application training	Practice	1.0	20		20	1.5	25	45	VII
85	obligatory	concentrated	jd01841010	Electrical CAD Application	Practice	1.0	20		20	1.5	25	45	VII
86	obligatory	concentrated practice	dq02712010	Power System Comprehensive Test	Practice	1.0	20		20	1.5	25	45	VII
87	obligatory	concentrated practice	dq02801010	Practical Skills in Scientific Writing and Literature Retrieval	Practice	1.0	20		20	1.5	25	45	VII
88	obligatory	liberal education	my05011017	Current Situation and Policies	Lecture	0.25	8	7	1	0.25	0	8	VII
Total						19.25	376	7	369	28.75	487	863	
89	obligatory	graduation thesis/design	dq02692010	Graduation Project	Graduation Project	15.0	240	240		23.0	450	690	VIII
90	obligatory	liberal education	my05011018	Current Situation and Policies	Lecture	0.25	8	7	1	0.25	0	8	VIII
91	obligatory	liberal education		General Education Elective	Lecture	2.0	0	0		2.0	60	60	I-VIII
92	obligatory	liberal education	tw01601010	Social Practice	Practice	1.0	16		16	1.0	14	30	I-VIII
93	obligatory	liberal education	sc01601010	Innovation and Entrepreneurship Practice	Practice	2.0	32		32	2.0	28	60	I-VIII
94	obligatory	liberal education	tw01611010	Club activities	Practice	1.0	16		16	1.0	14	30	I-VIII
Total						21.25	312	247	65	29.25	566	878	
Amount to						179.0	3218	2239	980	230.0	3702	6920	

Internship: 20 class hours per week. Curriculum Design: 16 class hours per week. Graduation Design: 16 class hours per week.