Curriculum (1)

Course Category	Course Code	Course Title		Credits	Class Hours			Computational Lab. Hours	Out-of-class Hours	Lecture Hours Equivalent in Semesters of Each Year												Assessment Type	Selection Criterion Lectures hours
					Lectures hours	Lab Hours	Discuss hours			1st			2st			3st			4st				
										1	2	3	1	1	2	3	1	1	2	3	1		
Foundation Courses For General Education	13011070	A Short History of China of Recent & Modern Times		2	32				16			2										–	
	13013010	Fundamental Principles of Marxism		3	48									3								–	
	13011030	Conspectus of Mao Zedong Thought & Socialism with Chinese Characteristics		3	48				22						3							–	
	88011020	Basis of Ethics & Law		3	48						3											+	
	88011030	Current Affairs & Public Policies		0.5	8		8										1					–	
	88011010	Introduction to Career Planning		0.5	8		8													1		–	
	17001052	College EnglishII		2	32		32				4											+	
	17001053	College EnglishIII		2	32		32					4										+	
	17001054	College EnglishIV		2	32		32							4								+	
	18000601	Physical Education Ⅰ		0.5	32						2											–	
	18000602	Physical Education Ⅱ		0.5	32							2										–	
	18000603	Physical EducationⅢ		0.5	32									2								–	
	18000604	Physical EducationⅣ		0.5	32										2							–	
	99000002	College Computer Fundamentals						20	4		1											–	
	99000071	Computer Programming Ⅰ		2	36			32	4		3											+	
	99000072	Computer Programming Ⅱ		1.5	36			32	4			2										+	
	07011191	Engineering Mathematical Analysis Ⅰ	选	5	64		32	4			6											+	
	07011201	Higher Mathematics（A）Ⅰ	—	4.5	64		32		4		6											+	
	07011192	Engineering Mathematical Analysis Ⅱ	选	5	64		32	4				6										+	
	07011202	Higher Mathematics（A）Ⅱ	—	5	80		16		4			6										+	
	07011270	Geometry & Algebra（A）	选	4	64						4											+	
	07011280	Geometry & Algebra（B）	—	3	48	6	10	4			4											+	
	07011310	Probability and Statistics (A)		2.5	48	4								3								+	
	10021231	College Physics（B1）Ⅰ		3	40		24					4										+	
	10021232	College Physics（B1）Ⅱ		3	40		24							4								+	
	10021311	Experimental Physics Ⅰ		1		32						2										–	
	10021312	Experimental Physics Ⅱ		1		32								2								–	
	86001010	Military Theory		1	16									1								–	
	99910000	Electives of Humanities and Social Science courses		6	96																	–	
	99920000	Electives of Economic Manage courses		2	32																	–	
	99930000	Electives of Nature Science courses		2	32																	–	
Total				57.5	1224	68	160	84	50		15	16		19	5		3			1			

Curriculum (2)

Course Category	Course Code	Course Title		Credits	Class Hours			Computational Lab. Hours	Out-of-class Hours	Lecture Hours Equivalent in Semesters of Each Year												Assessment Type	Selection Criterion Lectures hours
					Lectures hours	Lab Hours	Discuss hours			1st			2st			3st			4st				
										1	2	3	1	1	2	3	1	1	2	3	1		
Foundation Courses For General Education	02911101	The Origin of Mechanism	Select 1	1	16		16				2											–	
	02911102	BioMechatronics		1	16		16				2											–	
	02911103	Automatic Control in Mechanical Engineering		1	16		16				2											–	
	02911104	Creativity Development		1	16		16				2											–	
	02911105	Hot Scientific Equipment		1	16		16				2											–	
	02911106	Design and manufacture for micro/nano biomedical device		1	16		16				2											–	
	02911107	An Introduction to Industrial Engineering		1	16		16				2											–	
	02911108	Ideas and methods of industrial engineering		1	16		16				2											–	
	02911109	The Origin of Mechanism		1	16		16				2											–	
	02063061	Measurement and Control Technology（1）		3					10								3					+	
	02063062	Measurement and Control Technology（2）		2					10									2				+	
	02101010	Engineerig Material and Forming		3	42	12			24						4							+	
	02131020	Electrical Technology		2	32				20					2								+	
	02131030	Electronic Technology		3	48				28						3							+	
	05530040	Theoretical Mechanics（B）		4	56		16							4								+	
	05530050	Mechanics of Materials（B）		4	56		16								4							+	
	03321094	Engineering Thermodynamics		2	32										2							+	
	03321095	Engineering Fluid Dynamics		2	32										2							+	
Total				26	517	12	32		92					6	15	3	3	2					
Core Courses for Major	02023010	Mechanical-electronic Control Technology		2.5	40				16									3				+	
	02053020	Mechanical Manufacture Engineering		4	60	8			24									4				+	
	02013031	Principle and Method of Design I（1）		4	64			24	24						4							+	
	02013032	Principle and Method of Design I（2）		3	48			24	24								3A					+	
	02013034	Principle and Method of DesignII		3	48		24	24	24									3				+	
	02031036	Mechanical Drawing（A）I		3	36		24	12	12			3										+	
	02031037	Mechanical Drawing(A)II		3	36		24	12	12					3								+	
	02043010	Computer-aided Design	Select 2	2	28			8	24									2				+	required courses 4 credits
	02063020	Hydraulic and Pneumatic Technology		2	28	8			16									2				+	
	02074050	Man-machine Engineering		2	20		24		16									2				+	
	02084010	Theory and Application of Electromagnetic Compatibility		2	30	4														2		–	
	02114010	Principle of Vehicle Engine		2	30	4			16											2		–	
	02114021	Theory of Automobile		2	30	4			16									2				+	
	02123021	Methodology of Product Design		2	28		8		16											2		–	
Total				26.5	752	8	72	96	136			3		3	4	3		10					

Curriculum (3)

Course Category	Course Code	Course Title		Credits	Class Hours			Computational Lab. Hours	Out-of-class Hours	Lecture Hours Equivalent in Semesters of Each Year												Assessment Type	Selection Criterion Lectures hours
					Lectures hours	Lab Hours	Discuss hours			1st			2st			3st			4st				
										1	2	3	1	1	2	3	1	1	2	3	1		
Major & Interdisciplinary Electives	02023021	The Principle and Application of microcomputer		3	40	16			16								3A					+	
	03000183	Heat Transfer														2	2A					+	
	02024010	The Principle and Application of microcomputer	Select 1	2	28	8														2		–	elective 2 credits
	02054010	Finite Element Analysis		2	26			12												2		–	
	02084040	Engineering Electromagnetic Fields		2	28	8												2				–	
	03013070	Fluid Machinery		2	29	6												2				–	
	03034030	New Electricity Generation and New Energy Technology		2	32		8													2		–	
	07011350	Numerical Methods		2	32			16									2					–	
	02013035	Methods for Modern DesignIII	Select 2	2	24		16	16	16											3		–	elective 4 credits
	02013036	Methods for Modern DesignIV		2	24		16	16	16											3		–	
	02044021	Computer Aided Manufacturing		2	24		24													3		–	
	02044011	Numerical Controlled Machine and CNC Machining Technology		2	24		24													3		–	
	02044071	Modern mold and die manufacturing technology		2	24		24													3		–	
	02053071	Industrial Geometric Computation with Applicatons		2	24		24													3		–	
	02Se082	Analysis and control of machine vibration		2	24		24													3		–	
	02064031	Principle and method of fault diagnosis		2	24		24													3		–	
	02054021	Vibration Problems in Engineering		2	24		24													3		–	
	02063021	Fluid Power Transmission and Control Technology for Industrial Application		2	24		24													3		–	
	02114011	Modern electric vehicle		2	24		24													3		–	
	02074031	Robotics and Application		2	24		24													3		–	
	02024031	Mechatronics System Motion control Technology		2	24		24													3		–	
	02024041	Computer Hardware Technology		2	24		24													3		–	
	02074021	Principle and Realization Technology for Electronic Production Equipment		2	24		24													3		–	
	02074011	Electromechanical Design		2	24		24													3		–	
	02084050	Structural Design for Environmental Adaptability of Electronic Equipments		2	24		24													3		–	
	02134031	Quality Engineering and Applied Statistics		2	24		24													3		–	
	02124091	Product Conceptual Design		2	24		24													3		–	
	02124095	Humanization Product Design		2	24		24													3		–	
	02014071	Heat Transfer of Nasocale Fluid and Molecular Dynamics Simulation		2	24		24													3		–	
	02014072	Measurement of Thermal Properties in micro/nanoscale		2	24		24													3		–	
	02014041	Micro/nano electromechanical system		2	24		24													3		–	
Total				11	1698	20			16							5							

Practical Trainings

Course Requirements	Course Code	Course Title		Credits	Class Hours			Out-of-class Hours		Lecture Hours Equivalent, or Weeks, in Semesters of Each Year											
										1st			2st			3st			4st		
					Lectures	weeks	days per week	weeks	days per week	1	2	3	1	2	3	1	2	3	1	2	3
Class	02004911	Comprehensive Practice of Mechanical Design and Manufacturing	Select 1	2		4	5	2	5											3B	
	02074911	Comprehensive Practice of Mechatronics		2		4	5	2	5											3B	
	02114911	Comprehensive Practice of Vehicle Engineering		2		4	5	2	5											3B	
	02124911	Comprehensive Practice of Product Design		2		4	5	2	5											3B	
	02003030	Measurement and Control Experiment of Mechanical System		1													1	1			
	02003040	Experiment of Mechanical-electronic Control Technology		0.5														1			
	02004040	Dismantling-Installing Experiment of Vehicle Structure(Optional)		0.5																✓	
	02134910	Production practice		2		2	5												2		
	02134920	Graduation Project		8																	✓
	81011010	Practice of Fundamental Machanical Manufacturing		1									✓								
	81012060	Understanding Industrial Systems Ⅰ		0.5	16						✓										
	81012070	Understanding Industrial Systems Ⅱ (Optional)		0.5	16							✓									
	84101971	practical Training of Electrics and Electronics Technology 1			24									2							
	86001100	Military Orientation		2	16	3	5			(3)											
	99930050	Computer Integrated Course Design		0.5	16								✓								
	02001031	Experiment of Principle and Method of Design I		1													2				
	02001034	Mechanical Manufacturing Experiment		0.5														1			
	02001911	Principle and Method of Design I Comprehensive training		2														3B			
	02054911	Practical Training of Machanical Manufacturing		1.5		2	5												2		
	02001030	Experiment of Principle and Method of Design I（0）													1						
	02001032	Experiment of Principle and Method of Design I（1）														2					
	84101974	practical Training of Electrics and Electronics Technology 2		1.5											3						
Extra-curricula	02000010	Social Practice		1																	
	18000605	Physical EducationⅤ		0.5													✓	✓			
	18000606	Physical EducationⅥ		0.5																✓	
	02000020	Cultural Educational Practice		1																	
	02000030	Extra-curricular Study & Research		2																	
Total				29																	