1st Academic Year

	Semester 1	Credits	Semester 2	Credits
Required courses	Technical Report Writing	1/2	Thesis	6/0
	Seminars (I)	1/2	Seminars (II)	1/2
			Practice of English Oral Presentation	1/2
Elective courses (General Courses)	Theory and Practice of Artificial Intelligence	3/3	Numerical Analysis	3/3
	Experimental Design and Quality Engineering	3/3	Finite Element Method	3/3
			Statistical Process Control	3/3
Elective courses (Courses of Design and Manufacturing)	Precision Cutting	3/3	Practice on Metal Forming Die Design	3/4
	Stamping Dies Design	3/4	Plastics Engineering	3/3
	Laser Materials Processing	3/3	Stamping Dies Analysis	3/4
	Optical System Design	3/3	Practice of Intelligent Injection Molding Molds and Machines	3/3
	Vibration Measurement and Practice	3/4	Mechanism Design and Practice	3/4
	Intelligent Condition Monitoring System	3/3	Mold and die Materials and Heat treatment	3/4
	NC Programming for Multi-Axis Machine	3/3	Vehicle Dynamic Analysis	3/3
	Introduction to Micro-Electromechanical System	3/3	Micro Electro - Mechanical System Design	3/3
	Special Topics to Nano and Micro Manufacturing Technology	3/3	Product Innovation and Concurrent Design	3/3
	Introduction to Metal Industry Technology	3/3	Design and Applications of LED Lighting	3/3
			Introduction to Semiconductor Manufacturing Technology	3/3
			Special Topic of project Management	3/3

			Computer-Aided Engineering Based on Finite Element Method	3/4
			Introduction to Simulation of Optics and Optical System	3/3
Elective courses (Courses of Automation)	Advanced PLC	3/3	Production Control Information Systems	3/3
	Digital Signal Processing and Electric Machine Control	3/3	Intelligent Production Scheduling	3/3
	Intelligent Automation	3/3	Electric Machinery and Servo Control System Design	3/3
	Sensor Principle and Practice	3/3	Design and Implementation of Precise Motion Systems Control	3/3
	Observer Design in Control System	3/3	Theory and Practice of Collaborative Industry Robots	3/3
	Servo Control Practice	3/3	Computer Vision	3/3
			Digital Control System	3/3
			Practice and Electronic Circuit Design for Digital Control System	3/3
			Advanced Motion Control	3/3

2nd Academic Year

	Semester 1	Credits	Semester 2	Credits
Required courses	Thesis	6/0	Thesis	6/0
	Seminars (III)	1/2		
Elective courses (General Courses)	Experimental Design And Quality Engineering	3/3		
	Theory and Practice of Artificial Intelligence	3/3		
Elective courses (Courses of Design and Manufacturing)	Special Topics to Nano and Micro Manufacturing Technology	3/3	Introduction to Simulation of Optics and Optical System	3/3
	Optical System Design	3/3	Special Topic of Project Management	3/3
	Intelligent Condition Monitoring System	3/3	Theory and Application of Artificial Neural Networks	3/3
Elective courses (Courses of Automation)	Digital Signal Processing and Electric Machine Control	3/3	Advanced Motion Control	3/3
	Sensor Principle and Practice	3/3	Computer Vision	3/3