

The Courses of the 4-years college Program in Department of Electronic Engineering

Grade	The First Year		The Second Year		The Third Year		The Fourth Year	
	The first semester	The Second Semester						
Common required courses/Semester								
Introduction to Computers	3							
Calculus(I)	4							
The Theory of Electricity	3							
Electrical Laboratory	1							
English for Electrical Engineering	1							
Introduction to Internet	3							
Electronic		3						
Calculus(II)		4						
Physics		3						
English for Computer Engineering		1						
Digital Design		3						
Digital Design Laboratory		1						
Programming Language		3						
Circuit Theory(I)			3					
Electronic Circuits			3					
Electronic Circuits Laboratory			1					
Data Structure			3					
Digital Electronic Circuits				3				
Practical Projects(I)						2		
Practical Projects(II)							2	
Special Seminars(I)							0	
Special Seminars(II)								0
Professional Courses								
Linear Algebra	3							
Electronic Laboratory		1						
Differential Equations and Vector			3					
Circuits Simulation Laboratory			1					
Fabrication of Semiconductor Devices			3					
Hardware Description Language			3					
Discrete Mathematics			3					
Probability			3					
Introduction to Electronic Materials			3					
Assembly Language				3				
Circuit Theory(II)				3				
Fourier Analysis and Laplace				3				
Windows Programming Design				3				
Operating System Applications				3				
Fundamental of FPGA Design Laboratory				1				
Power Electronics				3				
Introduction to Programming Logic Design				3				
Layout Experiments of Integrated Circuits				1				
Introduction to VLSI Design				3				
High-Speed PCB Design and Laboratory					1			
Introduction to Photovoltaic System					3			
Signals and Systems					3			
Communications Principles					3			
Microprocessor principle and applications					3			
Industrial Practice					2			
Communication Circuits Laboratory					1			
FPGA Topics Laboratory					1			
Computer Network					3			
Microprocessor Laboratory					1			
Computer Organization					3			
Electromagnetics					3			
Object-Oriented Programming					3			
Introduction to the Design and Application of Intelligent Electronic Systems					3			
Introduction to Electro-Optical Engineering					3			
Practical Applications of Solar Energy						3		
Digital Signal Processing						3		
Numerical Methods						3		
Embedded Real-time Operating System Applications						3		
Computer Network Laboratory						1		
Complex Variables						3		
RF Circuit Design and Laboratory						1		
High-Frequency Switching Power Supply Circuits						3		
Introduction to Smart Grid						3		
VLSI Design							3	
SOC (System-on-Chip) Design							3	
Analog Circuit Design and Laboratory							2	
Power Converter Design for Renewable Energy							3	
Power Energy Storage and Power Conversion Techniques							3	
Energy Conservation and Illumination Design							3	
Power Converter Hand-on Experience and Simulation Practice							2	
Random Process							3	
Design and Performance Analysis of Emergent Wireless Broadband Technologies							3	
Embedded Linux Driver Design							3	
Silicon Intellectual Property Design							3	
High Tech Patent Application and Protection							2	
RF Integrated Circuit Design							3	
High Power Driving Integrated Circuit Design							3	
Embedded System Design								3
VLSI Design Laboratory								2
Analog IC Design								3
System on Chip Design Laboratory								2
Hardware/Software Co-design								3
Advance Analog IC Layout and Design								3
Distributed Energy Combination System								3
High Brightness LED Driving System								3
Power Conversion Circuits Design								3
Wind-PV Generation System								3
RFID Principle and Applications								3
ASIC Chip Design								3
Digital Communication IC Design								3
Advance Applications of Microprocessor								3
total	3	1	19	26	36	23	39	40