Courses description
University of Electronic Science and Technology of China

Name: Chen, Zhiwei

Course	credits	Duration (weeks)	Description
Linear Algebra and Space Analytical Geometry	4	16	Matrix, Linear Space, Analytical Geometry
Advanced Programming Language Design	2	16	The C Programming Language
Calculus I	6	16	Calculus
Calculus II	5	16	Calculus
Modern Engineering Design Drawing	2	16	Drawing the structure of the objects by hand and AutoCAD
College Physics I	4	16	Fundamentals of Physics
College Physics II	4	16	Fundamentals of Physics
Fundamentals of Circuit Analysis	4	16	Circuit Variables , Circuit Elements , Simple Resistive Circuits , Techniques of Circuit Analysis , Kirchhoff's Voltage Law Problems , Kirchhoff's Current Law Problems , Nodal Analysis Problems , Mesh Analysis Problems , etc.
Fundamentals of Software Technology	3	16	Data Structure, Algorithm, Software Development
Fundamental of Analogue Circuit	4	16	Semiconductor device such as diode, triode, etc. Amplifier, Feedback circuit, design of operational amplifier
Probability Theory and Mathematical Statistics	3.5	16	Probability Theory and Mathematical Statistics
Signal and System B	4	16	A.V. Oppenheim:Signal and System
Equations in Mathematical Physics and Special Functions	2	8	The application of mathematics to sovle the special physics problems
Function of a complex Variable	2	8	Complex Function , Integral Transform

Statistical Physics	2	16	Thermodynamics and Statistical Physics
Electronmagnetic Field and Wave	4	16	Electromagnetic Theory
Quantum Mechanics	4	16	Quantum Mechanics
Digital Design and Applications	4	16	John F. Wakerly:Digital Design - principles and Practices
Principle of Microcomputer System and Interface	4	16	Computer Architecture, Assembler Language, Microcomputer Interface
Solid-State and Semiconductor Physics	4	16	Solid-State and Semiconductor Physics
Physical Optics	4	16	Electromagentic Theory of Light, Basic Properties of Light and Media , Interference of Light, Diffraction of Light, Polarization of Light
Experiment of Optics	2.5	8	Use the optical method to measure the Velocity of ultrasonic wave in liquid, measure the refractive index, measure the optical filter's spectral character, etc
Information Display Technology	2.5	8	the Introduction of Display Technology
Microwave Techniques	3	8	Maxwell's electromagnetic theory in waveguide, microwave cavity , coupler , filter, etc.
Single-chip Computer and its Application	4	16	The structure of the Single-chip Computer , Single-chip Computer Programming
Applied Optics	3	8	Geometrical Optics, The Light ' s Character of Transmission and Imaging in Optical System
Optical Fiber Communication	3	16	Geometrical Optics and Electromagnetic Field in Optical Fiber and Optical Communication System
Experiment of Optical Fiber Communication	1	4	Fiber splice , learn how to use OTDR, measure the error rate in the fiber, the use of photo coupler

Special Topics of New Technology of Optic-electronic Information	2	16	Introduction of the New Technology of Photonics
Synthesis Experiment of Modern Electronic Technology	2	16	use the FPGA to design a frequency meter
Optoelectronic Image Processing	3.5	16	The Fundamentals of Vision, Imageenhancement, ImageTransformation, Image coding and Compression, ImageSegmentation and Fusion, Pattern Recognition, Target Tracking
Principle of Communication	2	8	Principle of Communication
Princile of Laser and Technology	4	16	Princile of Laser and Technology
Experiment of Electronic Technology	2	16	Design a Filter , Square-wave Generator, Triangle Wave Generator, Sinusoidal Signal Generator
Electronic Assembly Practice	0.5	1	Make a radio
Metal Working Practice	1	1	Use the numerical control machine to make a mold , make a hammer by myself
Experiment of Mathematic	2	8	mathematical modeling, learn how to programme in Matlab
Experiment of Physics	4	16	Millikan's 'oil-drop' experiment, Michelson-Morley experiment, Young's light-interference experiment, Hall Effect experiment
Experiment of Applied Electronic TechnologyI (Digital Circuit Basis)	1	16	The application of encoder, decoder, dataselector
Experiment of Applied Electronic Technology II(Digital Cicuit Synthesis)	1	16	The application of data distributor, shift register, counter
Outline of Mao Zedong', Deng Xiaoping's Theory and Three Represents Thought	4	16	Outline of Mao Zedong', Deng Xiaoping's Theory and Three Represents Thought
Practice of Outline of Mao Zedong', Deng Xiaoping's Theory and Three Represents Thought	2	16	Practice

Principle of Marxism	3	16	Principle of Marxism
Practice of Principle of Marxism	1	16	Practice
Military Theory	1	8	Military Theory
Military Practice	2	8	Practice
College English I	4	16	English Course
College English 2	4	16	English Course
College English 3	4	16	English Course
College English 4	2	16	English Course
Introduction to Modern Chinese History	2	16	History
Practice of Modern Chinese History	1	16	Practice
Ethics Education and Basis of Law	3	16	Ethics Education and Basis of Law
Practice of Ethics Education and Basis of Law	1.5	16	Practice
Drama Appreciation	2	16	Appreciate Drama
Science and Humanity Thought	2	8	Introduction of Science and Humanity Thought
Physical Education I	1	16	Physical Education
Physical Education II	1	16	Physical Education
Elective Physical Education	1	16	Physical Education
Physical Education III	1	16	Physical Education
Badminton	1	16	Physical Education

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