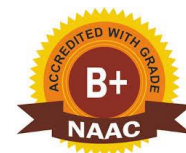




AAER's

Asian College of Science and Commerce

Affiliated to SPPU and Approved by Govt of Maharashtra Accredited by NAAC with B+ Grade



Course Outcomes

The examination format consists of continuous assessment, which accounts for 30 marks for internal evaluation and 70 marks for external evaluation.

Class: M.Sc. I Electronics (Semester-I)

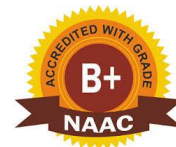
Sr. No.	Subject	Course Outcome
1	Mathematical Methods in Electronics using C	To get familiar with role of differential equations in applied electronics
		To know about mathematical tools and techniques for network analysis
		To learn the methods of analysis for CT and DT signals and systems
		To learn concept of mathematical modeling of simple electrical circuits
2	Analog Circuit Design	Student should visualize/ imagine molecules in 3 dimensions.
		To understand the concept of symmetry and able to pass various symmetry elements through the molecule.
		Understand the concept and point group and apply it to molecules.
		To apply the concept of point group for determining optical activity and dipole moment
3	Digital System Design	To understand sequential and combinational logic design techniques
		To introduce VERILOG
		To learn various digital circuits using VERILOG
		To learn PLD, CPLD, FPGA and their applications
4	Fundamentals and applications of PIC microcontrollers	Understand features and architecture of PIC microcontroller.
		Understand fundamentals of PIC microcontroller.
		Demonstrate how to interface PIC microcontroller with different peripherals.
		Understand the C language programming for interfacing of PIC microcontroller.



AAER's

Asian College of Science and Commerce

Affiliated to SPPU and Approved by Govt of Maharashtra Accredited by NAAC with B+ Grade



Course Outcomes

The examination format consists of continuous assessment, which accounts for 30 marks for internal evaluation and 70 marks for external evaluation.

Class: M.Sc. I Electronics (Semester-III)

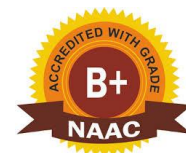
Sr. No.	Subject	Course Outcome
1	Applied Electromagnetics, Microwaves and Antennas	To introduce to students the concepts of electromagnetics
		To understand the theory of transmission lines and wave guides
		To study various parameters of antennas To study various parameters of antennas
		To study various methods of generation of microwaves
2	Instrumentation and Measurement Techniques	To understand the configurations and functional descriptions of measuring instruments
		To understand the basic performance characteristics of instruments
		To understand the working principles of various types of sensors and transducers and their use in measuring systems
		To understand the relevance of electronics with other disciplines
3	Foundation of Semiconductor Devices	To introduce crystal structure with reference to semiconductors
		To introduce quantum and statistical mechanics
		To understand the characteristics of semiconductor devices
		To introduce theory of diode, transistor and FETs
4	Fundamentals and applications of AVR Microcontroller	To understand the architecture, assembly language and interfacing of AVR
		To learn embedded C programming
		To learn software techniques to embed codes in to the systems
		To understand the architecture, assembly language and interfacing of AVR



AAER's

Asian College of Science and Commerce

Affiliated to SPPU and Approved by Govt of Maharashtra Accredited by NAAC with B+ Grade



Course Outcomes

The examination format consists of continuous assessment, which accounts for 30 marks for internal evaluation and 70 marks for external evaluation.

Class: M.Sc. II Electronics (Semester-III)

Sr. No.	Subject	Course Outcome
1	Advanced Communication systems	Analyze continuous wave/analog method of communication (AM, FM and PM) considering noise, its generation and demodulation techniques
		Compare different pulse modulation techniques (analog as well as digital)
		Analyze digital modulation techniques and related correction methods
		Distinguish different radio wave propagation techniques and Understand basic theory of antenna and their types as per applications
2	Mechatronics and Robotics	Identify different components or blocks in any mechatronic system
		Analyze mechatronic systems using system models and dynamic responses using transformation methods
		Distinguish different sensing and actuating mechanisms used in mechatronics and robotic systems
		Compare different control mechanisms used in robotic systems
3	Control System	Compare different control loop systems such as open loop, closed loop, DCS, SCADA etc
		Analyze the control systems using different mathematical techniques such as transfer function and different stability criterion
		Analyze and Distinguish different types of analog and digital controllers and control modes
		Design, develop and implement control systems for given applications
4	Fundamentals of Wireless communication system	Compare different wireless techniques such as mobile, radio, satellite etc
		Understand modern wireless techniques
		Distinguish wireless systems on the basis of performance features



AAER's

Asian College of Science and Commerce

Affiliated to SPPU and Approved by Govt of Maharashtra Accredited by NAAC with B+ Grade



Course Outcomes

The examination format consists of continuous assessment, which accounts for 30 marks for internal evaluation and 70 marks for external evaluation.

Class: M.Sc. II Electronics (Semester-IV)

Sr. No.	Subject	Course Outcome
1	PLC Programming and Applications	Understand basics of Programmable Logic Controllers, their working and their programming
		Design, modify and troubleshoot such control circuits
		program PLCs to automate the systems for different applications
2	Technical Communication	Utilize the technical writing for the purposes of Technical Communication and its exposure in various dimensions.
		Understand the nature and objective of Technical Communication relevant for the work place
		Evaluate and present gist of the books in the form of book review
		Prepare documents for thorough understanding of applications and promote their technical competence
3	PLC Programming and Applications Practical	Explain the use of industrial grade components in automation
		Understand relay logic diagram and its use in different applications
4	Project/Internship	Understand the social, economic and administrative considerations that influence the working environment of industrial organizations
		Understand the psychology of the workers and their habits, attitudes and approach to problem solving
		Familiarize with various materials, processes, products and their applications along with relevant aspects of quality control.
		Expose to the responsibilities and ethics in industrial environment

