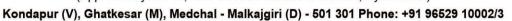
[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)





Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: MICROPROCESSORS AND MICROCONTROLLERS (C313)

After going through this course the student will

SNO	COURSE OUTCOMES	BT Level
C313.1	Understand the principle of operation of Intel 8086 microprocessor	1
C313.2	Execute assembly language programs on Intel 8086 including ascending order and descending order of data, string operations	3
C313.3	Integrate Intel 8086 processor with 8255, DMA controller, Intel 8259, USART to develop the microprocessor based system	5
C313.4	Develop and run program of Intel 8051 microcontroller	5
C313.5	Analyze architecture and interrupt structure of RISC microcontrollers	4

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C313.1	3	3	2	2	2	1	1	-	2	1	1	1	3	2	1
C313.2	3	3	2	1	2	1	-	1	2	1	1	2	2	3	2
C313.3	2	3	2	2	1	2	1	-	1	2	-	1	3	3	1
C313.4	3	3	3	1	2	1	-	-	1	1	2	2	2	2	-
C313.5	3	2	2	2	2	1	1	-	2	2	1	-	3	1	1
Average	2.8	2.8	2.2	1.6	1.8	1.2	1	1	1.6	1.4	1.2	1.5	2.6	2.2	1.2

[Sponsored by Lavu Educational Society]





Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: DATA COMMUNICATIONS AND NETWORKS (C326)

After going through this course the student will

SNO	COURSE OUTCOMES	BT Level
C326.1	Understand network communication using the layered concept, Open System Interconnect (OSI) and the Internet Model.	2
C326.2	Understand various types of transmission media, network devices; and parameters of evaluation of performance for each media and device.	2
C326.3	Understand the concept of flow control, error control and LAN protocols; to explain the design of, and algorithms used in, the physical, data link layers.	2
C326.4	Understand the functions performed by a Network Management System and to analyze connection establishment and congestion control with respect to TCP Protocol.	2
C326.5	Understand the principles and operations behind various application layer protocols like HTTP, SMTP, FTP.	2

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C326.1	3	2	2	2	2	3	3	2	3	3	1	3	3	3	2
C326.2	3	2	2	3	2	3	3	3	3	3	3	3	3	3	2
C326.3	3	2	3	2	2	3	3	2	3	3	2	3	3	2	2
C326.4	2	2	2	2	2	3	3	3	3	3	3	3	2	3	2
C326.5	2	2	2	2	2	3	3	3	3	3	2	3	3	2	2
Average	2.6	2	2.2	2.2	2	3	3	2.6	3	3	2.2	3	2.8	2.6	2

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)





Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: CONTROL SYSTEMS (C301)

After going through this course students will be able to

SNO	COURSE OUTCOMES	BT Level
C301.1	Describe the feedback control	2
C301.2	Describe basic components of control systems	2
C301.3	Analyze various time domain methodologies for the design of linear control systems	4
C301.4	Analyze frequency domain methodologies for the design of linear control systems	4
C301.5	Analyze methods of stability analysis of systems from transfer function forms and able to develop the state space models for various systems	4

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C301.1	3	3	3	3	3	1	1	-	2	-	2	1	2	2	1
C301.2	2	3	3	2	3	1	1	-	2	1	2	-	2	2	1
C301.3	3	2	3	2	3	1	1	-	2	1	2	1	3	2	1
C301.4	3	3	2	1	3	1	2	1	2	2	1	1	1	1	2
C301.5	3	3	3	2	3	1	1	-	2	1	2	-	2	2	1
Average	2.8	2.8	2.8	2	3	1	1.2	1	2	1.25	1.8	1	2	1.8	1.2

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: BUSINESS ECONOMICS AND FINANCIAL ECONOMICS (C327)

After going through this course the student will be able to

SNO	COURSE OUTCOMES	BT Level
C327.1	Understand the various Forms of Business and the impact of economic variables on the Business.	2
C327.2	Analyse the Demand and Supply requirements of the firm,	4
C327.3	Understand Production, Cost, Market Structure, Pricing aspects.	2
C327.4	Interpret the firm's financial position of a Company.	3
C327.5	Analyze the Financial Statements of a Company.	4

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3
C327.1	-	-	-	-	2	1	1	2	2	-	2	-	-	-	3
C327.2	1	-	1	1	2	1	1	2	2	1	2	1	1	1	3
C327.3	1	1	1	1	2	2	1	2	2	-	2	1	-	-	3
C327.4	-	1	1	1	2	1	1	2	2	1	2	1	1	1	3
C327.5	1	1	1	1	2	1	1	2	2	1	2	1	1	1	3
Average	1	1	1	1	2	1.2	1	2	2	1	2	1	1	1	3

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: COMPUTER ORGANSATION AND OPERATING SYSTEMS (C302)

After going through this course students will

SNO	COURSE OUTCOMES	BT Level
C302.1	Understand the basic structure of a digital computer	1
C302.2	Perform arithmetic operations of binary number systems	3
C302.3	Understand organization of the control unit, ALU, memory unit and I/O unit.	1
C302.4	Discuss operating system functions, types, system calls and its interface.	2
C302.5	Discuss about memory management techniques and deadlock avoidance.	2

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C302.1	3	3	2	2	2	1	2	1	3	3	1	1	1	2	1
C302.2	2	2	2	2	2	1	1	1	2	2	2	2	1	2	1
C302.3	2	3	2	2	2	1	1	1	2	2	1	2	1	2	-
C302.4	1	3	1	2	1	2	-	1	2	1	-	-	3	1	1
C302.5	2	3	2	2	2	1	1	1	2	2	2	-	1	2	1
Average	2	2.8	1.8	2	1.8	1.2	1.25	1	2.2	2	1.5	1.67	1.4	1.8	1

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: MICROPROCESSORS AND MICROCONTROLLERS LAB (C315)

After going through this course the student will

SNO	COURSE OUTCOMES	BT Level
C315.1	Demonstrate MASM assembler programming.	3
C315.2	Develop an ALP in 8086 and its interfacing circuits.	5
C315.3	Develop an ALP in 8051 for parallel ports and timers	5
C315.4	Develop an ability in designing a microprocessor and microcontroller systems	5
C315.5	Apply standard test and measurement equipment to evaluate digital interfaces.	3

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C315.1	3	3	2	2	2	1	1	-	2	2	-	-	3	2	1
C315.2	3	3	2	2	2	1	-	-	2	1	1	-	2	3	2
C315.3	2	3	2	2	2	2	1	-	1	2	1	1	3	3	2
C315.4	3	3	3	2	2	1	-	-	1	1	-	1	2	2	2
C315.5	3	2	2	2	2	1	1	1	2	2	-	-	3	1	1
Average	2.8	2.8	2.2	2	2	1.2	1	1	1.6	1.6	1	1	2.6	2.2	1.6

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)





Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: DATA COMMUNICATIONS AND NETWORKS LAB (C328)

After going through this course the student will

SNO	COURSE OUTCOMES	BT Level
C328.1	Understand fundamental underlying principles of computer networking	2
C328.2	Apply mathematical foundations to solve computational problems in computer networking	3
C328.3	Analyze performance of various communication protocols.	4
C328.4	Compare routing algorithms	4
C328.5	Practice packet /file transmission between nodes.	3

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C328.1	2	1	1	-	-	-	-	-	-	-	-	1	2	2	-
C328.2	2	2	2	3	1	-	-	1	1	-	2	-	2	2	-
C328.3	1	2	3	3	1	-	1	-	1	2	2	1	2	2	1
C328.4	2	1	2	1	1	1	-	-	-	-	1	-	2	1	-
C328.5	1	1	2	2	1	1	-	-	1	2	2	1	2	2	1
Average	1.6	1.4	2	2.2	1	1	1	1	1	2	1.75	1	2	1.8	1

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: ADVANCED COMMUNICATIONS SKILLS LABORATORY (C325)

After going through this course the student

S.NO	COURSE OUTCOMES	BT Level
C325.1	Develop their LSRW skills	5
C325.2	Overcome their Mother tongue influence	2
C325.3	Express/interpret their views without hesitation	2
C325.4	Lose their stage fear and develop self-confidence	2
C325.5	Be able to reach corporate expectations	2

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
C325.1	1	1	1	-	2	3	3	2	2	2	1	3	-	1	1
C325.2	1	-	1	1	2	1	3	1	2	3	1	3	-	-	1
C325.3	-	-	1	-	2	3	3	2	2	3	1	3	1	-	1
C325.4	1	-	2	-	1	3	3	2	2	3	1	2	-	-	1
C325.5	1	-	1	-	2	3	2	2	2	3	1	3	-	-	2
Average	1	1	1.2	1	1.8	2.6	2.8	1.8	2	2.8	1	2.8	1	1	1.2

[Sponsored by Lavu Educational Society]







Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: INTELLECTUAL PROPERTY RIGHTS (C329)

After going through this course the student will

SNO	COURSE OUTCOMES	BT Level
C329.1	Discuss the fundamental aspects of Intellectual property Rights which play a major role in development and management of innovative projects in industries.	2
C329.2	Examine Trademarks, Acquisition of Trade Mark Rights and its registration processes.	4
C329.3	Evaluate various aspects relating to copyrights and its procedure for registration processes.	6
C329.4	Evaluate with the Trade Secret Law, protection for submission, Unfair Competition	6
C329.5	Interpret about current trends in IPR and the steps taken by the Government of India in fostering IPR	3

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C329.1	-	-	-	-	-	-	-	3	1	-	-	1	-	-	2
C329.2	-	-	-	1	-	-	-	3	1	1	1	-	-	-	2
C329.3	-	-	-	-	1	-	-	3	1	1	1	-	-	-	2
C329.4	-	-	-	-	1	-	-	3	1	1	1	-	-	-	2
C329.5	-	-	-	-	-	-	-	3	1	-	-	1	-	-	2
Average	-	1	1	ı	1	ı	ı	3	1	1	1	1	-	-	2

[Sponsored by Lavu Educational Society]
(Approved by AICTE, New Delhi & Affiliated to JNTUH, Hyderabad.)

Kondapur (V), Ghatkesar (M), Medchal - Malkajgiri (D) - 501 301 Phone: +91 96529 10002/3



Department of Electronics and Communication Engineering

III B.Tech I Semester

SUBJECT: CYBER SECURITY (C334)

After going through this course the student will

SNO	COURSE OUTCOMES	BT Level
C334.1	Demonstrate on vulnerability scanning	
C334.2	Recognize various network defence tools	
C334.3	Interpret on web application tools	
C334.4	Inspect on various cyber crimes and its associated cyber laws	
C334.5	Examine various cyber crime investigation methods	

СО	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3
C334.1	3	2	3	2	3	-	3	3	-	-	-	2	3	2	3
C334.2	3	2	3	2	3	-	3	3	-	-	-	2	3	2	3
C334.3	3	2	3	2	3	-	3	3	-	-	-	2	3	2	3
C334.4	-	-	3	2	2	3	3	3	-	-	-	2	-	2	3
C334.5	-	-	3	2	3	3	3	3	-	-	-	2	-	2	3
Average	3	2	3	2	2.8	3	3	3	-	-	-	2	3	2	3