



PSC & KVSC Government College
(Affiliated to Rayalaseema University, Kurnool)
Bommalasatram, Nandyal, Nandyal District
Andhra Pradesh - 518502

**DEPARTMENT OF
ELECTRONICS**

POS, COS AND PSOS MAPPING

B.SC (MECS)

PROGRAMME OUTCOMES (POs):

On successful completion of Graduate Program, Graduating Students/ Graduates will be able to:

PO 1	Domain Expertise: Able to demonstrate a thorough understanding and grasp more academic subjects that are part of an undergraduate program of study.
PO 2	Effective Communication Skills: Effectively convey thoughts and ideas. Enhance the ability to present noteworthy information in a clear and concise manner to various groups.
PO 3	Critical Thinking: Evaluating and analyzing arguments, assertions, and opinions using empirical data. The ability to identify relevant assumptions or implications and construct logical arguments. Critically analyse practices, policies, and theories by utilizing a scientific approach to knowledge acquisition.
PO 4	Critical Problem Identification & Solving: The ability to apply one's competences to solve unfamiliar challenges based on what has been learned Apply one's learning to real-life scenarios.
PO 5	Teamwork / Coordination: Being able to facilitate a group's cooperative effort and act together as a group or team to achieve a common goal. Work effectively as an individual as well as a member of the team.
PO 6	IT literacy skills: The ability to utilize ICT in various learning situations. Using ICT tools to access, retrieve, and modify authenticated data using data analysis
PO 7	Life-long learning and Research related skills: Ability to habitualize self-learning and self-motivation Acclimate to the ever-increasing demands of the workplace and life. Skill in planning, conducting, and reporting the outcomes of an experiment or investigation. Ability to define a problem, test the problem, pose appropriate questions, and synthesize and articulate the problem
PO 8	Environmental Longevity: Get environmental awareness and follow eco-friendly practices to create a clean

	environment.
PO 9	Moral and Ethical Consciousness: Ability to live moral and ethical ideals and to use ethical practices in all aspects of one's job. Capable of demonstrating the ability to recognize ethical issues relevant to one's work, abstain from unethical behavior, show respect for environmental and sustainability issues, and act impartially and truthfully in all aspects of one's work.
PO 10	Effective Project Management: Determine the project's goals, objectives, and components, as well as the appropriate completion date. Plan and organize in such a way as to meet the targets on time. Be capable of recognizing opportunities and developing contingency plans.

PROGRAMME SPECIFIC OUTCOMES (PSOs)

With the goal of enabling students to gain a comprehensive understanding of Electronics knowledge as a field of study, both theoretically and practically, the Department of Electronics of PSC & KVSC Government College, offers two three-year undergraduate programs (BSC MPE & BSc MECs) that span six semesters. The following competences and skills will be acquired by students upon successfully completing the B.Sc. Computer Science Degree Program.

PSO 1	Understand the concepts of basic electronics components, network theorems, semi conductor devices, Analog and Digital circuits,
PSO 2	The ability to analyze different parameters of various circuits. the I/P, O/P V-I characteristics of the circuits.
PSO 3	Understand the principle, construction and operation of different electronic devices
PSO 4	Understand the interfacing techniques
PSO 5	Understand the application of Electronics in domestic, industrial and medical field

PSO – PO MAPPING

		Pos									
PSOs		1	2	3	4	5	6	7	8	9	10
	1	*	*		*		*				
	2	*	*	*	*		*	*			
	3	*	*	*	*			*			
	4	*	*		*		*	*		*	*
	5	*	*		*	*	*	*		*	*

COURSE OUTCOMES (COs)

Course Code: C1

Course Name: Circuit Theory & Electronics Devices

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Understand the concept of different electronic components. Understand the AC Voltage and DC Voltage.	1	1,2,3
CO 2	Understand the different network theorems.	2	1,4,7
CO 3	Understand input and output characteristics of circuits	2	3,4,7
CO 4	Understand the Principle, construction and working of semiconductor devices	3	1,4,7
CO 5	Understand the V-I characteristics of semiconductor devices. Gain the knowledge about the applications of semiconductor devices.	2,5	4,6,7

Course Code: C2

Course Name: Digital Electronics

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Understand the number system in the digital systems	1	1,2,4
CO 2	Understand the minimization of logic functions using Karnaugh maps	2	1,2,4
CO 3	Understand the combinational logic circuits	3	1,4,7
CO 4	Understand the sequential logic circuits	2	2,4,9
CO 5	Understand the memory devices.	4	1,4,7

Course Code: C3

Course Name: Analog circuits and Communication

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Understand the different parameters of OP-AMP and different configurations	2	1,2,4
CO 2	Understand the applications of OP-AMP.	5	1,2,7
CO 3	Understand AM wave generation and mathematical analysis of AM waves	2	2,3,7
CO 4	Understand FM wave generation and mathematical analysis of FM waves	2	2,5,7
CO 5	Understand the analog and digital communication.	3,4	3,4,7

Course Code: C4

Course Name: Microprocessor Systems

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Understand the basic concept of microprocessors.	1	1,2,4
CO 2	Understand Architecture and its services.	2	1,2,7
CO 3	Gain knowledge of various types of instructions.	2	2,3,7
CO 4	Gain knowledge in assembly language programming	3	2,4,7
CO 5	Learn interfacing of Microprocessors.	3,4	3,6,7

Course Code: C5

Course Name: Microcontrollers and Interfacing

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Understand the basic concept of microcontrollers.	1	1,2,4
CO 2	Understand Architecture and its services.	2	1,2,4
CO 3	Gain knowledge of various types of instructions.	2,3	4,6,7
CO 4	Gain knowledge in assembly language programming	2,3	2,4,7
CO 5	Learn interfacing of Microcontrollers	4	1,2,7

Course Code: 6A

Course Name: Industrial Electronics

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Understand the circuit functioning	1	1,2,3
CO 2	Learn the skills how to design the circuits of power supply	2	4,5,7
CO 3	Understand the principle and characteristics of voltage multipliers	3	4,5,7
CO 4	Understand the device characteristics	4	1,2,3
CO 5	Understand the principle and operation of different electronic heating devices	5	5,7,10

Course Code: 7A

Course Name: Electronic Instrumentation

Upon completion of this course, the student will be able to:		PSOs	POs
CO 1	Identify various facilities required to set up a basic instrumentation laboratory.	1,2	1,2,4
CO 2	Acquire a critical knowledge of various electrical instruments used in the laboratory	3	2,3,4
CO 3	Demonstrate skills of using instruments like CRO ,Function generator, multi meter etc. through hands on experience.	5	4,5,7
CO 4	Understand the Principle and operation of different display devices used in the display systems and different transducers.	4,5	1,2,4
CO 5	Comprehend the applications of various biomedical instruments in daily life like BP meter ,ECG, Pulse oxy meter etc. and know the handling procedures with safety and security.	4,5	4,6,7