



**Course Outcomes & CO-PO-PSO Mapping and Justification**

<b>Subject</b>	<b>EMBEDDED SYSTEMS</b>	<b>15CS563</b>
<b>COURSE OUTCOMES:</b>		
<b>CO No.</b>	<b>On completion of this course, students will be able to:</b>	<b>Cognitive Level</b>
15CS563.1	Understand the concept and design process of embedded systems.	L2
15CS563.2	Understand device and communication buses for device network.	L2
15CS563.3	Understand device drivers and interrupt service mechanism.	L2
15CS563.4	Apply threads, tasks, process, semaphores and RPC for IPC.	L3
15CS563.5	Develop embedded systems modules using RTOS.	L3

**CO-PO-PSO MAPPING**

CO No.	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
15CS563.1	2	-	-	-	-	-	-	-	-	-	-	2	-	-	2
15CS563.2	2	-	-	-	-	-	-	-	-	-	-	2	-	-	2
15CS563.3	2	-	-	-	-	-	-	-	-	-	-	2	-	-	2
15CS563.4	2	-	-	-	-	-	-	-	-	-	-	2	-	-	2
15CS563.5	2	-	1	-	1	-	-	-	-	-	-	2	-	-	2
<b>Avg. Mapping</b>	<b>2.0</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	<b>1.0</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2.0</b>	<b>-</b>	<b>-</b>	<b>2.0</b>

## CO-PO-PSO JUSTIFICATION

CO No.	PO/PSO	CL	Justification
15CS563.1	PO1	2	Moderately mapped as students acquire fundamental understanding of embedded systems, complex systems and microprocessors. Understand embedded system design process through real world examples.
	PO12	2	Moderately mapped as concept of embedded systems will help for lifelong learning, as it deals with real time applications.
	PSO3	2	Moderately mapped since embedded systems is relevant to design the components of Internet of Things.
15CS563.2	PO1	2	Moderately mapped as students learn different types of communication protocols.
	PO12	2	Moderately mapped as concept of embedded systems will help for lifelong learning, as the communication protocols can be enhanced.
	PSO3	2	Moderately mapped since embedded systems is relevant to design the components for communication.
15CS563.3	PO1	2	Moderately mapped as students gain the knowledge of Interrupts and device driver programming.
	PO12	2	Moderately mapped as concept of embedded systems will help for lifelong learning, as it deals with real time systems.
	PSO3	2	Moderately mapped since embedded systems is relevant to interaction between hardware and device driver programming.
15CS563.4	PO1	2	Moderately mapped as students acquire the knowledge of threads and IPC.
	PO12	2	Moderately mapped as concept of embedded computing systems will help for lifelong learning, as it deals with remote procedure calls (RPC).
	PSO3	2	Moderately mapped since embedded systems is relevant for designing the process for real time applications.
15CS563.5	PO1	2	Moderately mapped as students acquire the knowledge of real time operating systems (RTOS).
	PO3	1	Slightly mapped as students will be able to design embedded system applications using RTOS.
	PO5	1	Slightly mapped as students will be using simulators, emulators and hardware debugging tools for embedded system development using RTOS.
	PO12	2	Moderately mapped as concept of embedded systems will help for lifelong learning, as it deals with RTOS.

	PSO3	2	Moderately mapped since embedded systems is relevant to solve real world problems using RTOS.
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**Prepared by**

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