

**POs ASSESSMENT CALCULATION 2018-2022**

PO 1							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage%	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	34.04	26.00	3.24	3.47	2.86	3.76	3.84
Out of 80 & 20	67.87		17.17				
PO 1 Attainment	85.04						
PO 2							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage%	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	34.07	25.90	2.91	3.20	3.28	3.84	3.12
Out of 80 & 20	68.52		16.35				
PO 2 Attainment	84.31						
PO 3							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage%	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	34.88	26.30	3.68	3.08	3.30	3.88	3.83
Out of 80 & 20	68.51		17.77				
PO 3 Attainment	86.28						
PO 4							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage%	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	35.91	26.40	3.83	3.60	2.5	3.1	3.5
Out of 80 & 20	72.24		16.46				
PO 4 Attainment	88.70						


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Kuniamuthur, Coimbatore - 641 008, India

PO 5							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	36.65	25.90	3.8	2.56	2.8	3.0	3.04
Out of 80 & 20	76.20		15.24				
PO 5 Attainment	87.99						
PO 6							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	31.55	30.00	3.09	2.80	2.80	2.64	3.60
Out of 80 & 20	70.33		14.93				
PO 6 Attainment	93.82						
PO 7							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	36.57	28.80	3.48	2.96	2.87	2.92	3.60
Out of 80 & 20	75.09		15.83				
PO7 Attainment	90.92						
PO 8							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	38	29.00	3.40	2.76	3.79	3.50	3.80
Out of 80 & 20	75.52		17.25				
PO 8 Attainment	92.76						

  
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PO 9							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	33	26.00	3.34	3.12	3.14	3.04	3.00
Out of 80 & 20	68.79		15.63				
PO 9 Attainment	84.42						
PO 10							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	35.58	27.00	3.60	3.28	2.58	2.99	3.12
Out of 80 & 20	71.81		15.57				
PO 10 Attainment	87.38						
PO 11							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	37.71	28.80	3.70	3.47	2.73	2.92	3.40
Out of 80 & 20	76.21		16.23				
PO 11 Attainment	91.86						
PO 12							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage %	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	35.43	26.10	3.84	3.06	2.57	3.13	3.36
Out of 80 & 20	69.27		15.96				
PO 12 Attainment	85.23						

  
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**DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING**  
**PO - PSO ATTAINMENT THROUGH DIRECT ASSESSMENT METHODS (2018-2022)**

**PSOs ASSESSMENT CALCULATION 2018-2022**

PSO 1							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage%	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	27.66	25.90	3.72	3.19	2.85	3.05	3.48
Out of 80 & 20	61.16		16.29				
PSO 1 Attainment	85.43						
PSO 2							
	DIRECT TOOL END SEM WEIGHTAGE	DIRECT TOOL WEIGHTAGE	PROGRAM LEVEL STATISTICS	EXIT SURVEY	ALUMNI SURVEY	PARENTS FEEDBACK	EMPLOYER SURVEY
Weightage%	40.00	30.00	4.00	4.00	4.00	4.00	4.00
Obtained	35.30	25.90	3.84	3.14	2.61	3.16	3.31
Out of 80 & 20	68.80		16.08				
PSO 2 Attainment	84.87						

DEPARTMENT OF ECE

ATTAINMENT CALCULATIONS OF COURSE OUTCOMES

Course Details

Course Code	18EC603
Course Name	CMOS VLSI DESIGN
Academic Year	2020-2021
Semester	VI
Class	III year
Regulation	R2018
Batch	2018-2022

Course Outcomes(COs)

After the completion of this course, students will be able to

C603.1	Understand the basics of VLSI circuits and its impact in Industry
C603.2	Analyzing the various CMOS fabrication techniques and applying layout diagram
C603.3	Analyze the MOS transistor equations for presence of parasitic components
C603.4	Design of various CMOS logic structures for analyzing at transistor level
C603.5	Construction of Combinational and Sequential logic design based on timing analysis
C603.6	Analyzing the various clock designs and HDL programming for combinational and sequential circuits

Course outcome and Program Outcome Mapping

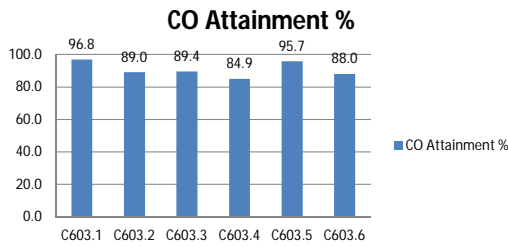
Correlation levels: 3-Substantial (High) 2-Moderate (Medium) 1 - Slight(Low)

CO/PO/PSO-Matrix

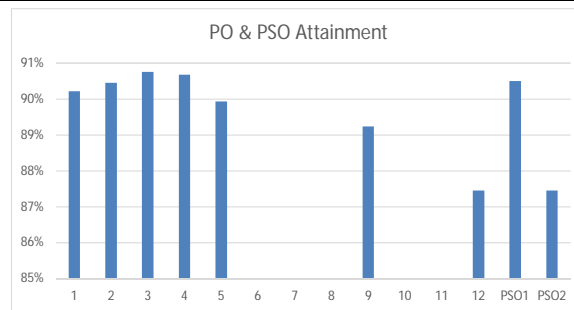
CO/PO/PSO	COURSE OUTCOMES	Program Outcomes												Program Specific Outcomes		
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	
C603.1	Understand the basics of VLSI circuits and its impact in Industry	2.00	1.00	3.00	2.00										3.00	
C603.2	Analyzing the various CMOS fabrication techniques and applying layout diagram	2.00	3.00	2.00	1.00					1.00					3.00	
C603.3	Analyze the MOS transistor equations for presence of parasitic components	2.00	2.00	3.00	1.00					1.00			1.00	3.00	1.00	
C603.4	Design of various CMOS logic structures for analyzing at transistor level	3.00	2.00	3.00	2.00								1.00	3.00	1.00	
C603.5	Construction of Combinational and Sequential logic design based on timing analysis	2.00	3.00	3.00	2.00	1.00								2.00		
C603.6	Analyzing the various clock designs and HDL programming for combinational and sequential circuits.	2.00	2.00	3.00	3.00	3.00							1.00	2.00	1.00	
	Average	2.17	2.17	2.83	1.83	2.00				1.00			1.00	2.67	1.00	


  
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18EC603- CMOS VLSI DESIGN-COURSE OUTCOMES ATTAINMENT										
Course Outcomes	CIA Attainment	Capstone Attainment	ESE Attainment	CES Attainment	Direct Attainment	Indirect Attainment	Course Outcomes Attainment	CO Attainment %	Attainment Status	Remedial Measures
C603.1	4.33	5.00	5.00	5.00	4.8	5.00	4.8	96.8	Attained	NIL
C603.2	2.71	5.00	5.00	5.00	4.3	5.00	4.5	89.0	Attained	NIL
C603.3	2.80	5.00	5.00	5.00	4.3	5.00	4.5	89.4	Attained	NIL
C603.4	1.86	5.00	5.00	5.00	4.1	5.00	4.2	84.9	Attained	NIL
C603.5	4.11	5.00	5.00	5.00	4.7	5.00	4.8	95.7	Attained	NIL
C603.6	2.50	5.00	5.00	5.00	4.3	5.00	4.4	88.0	Attained	NIL



18EC603- CMOS VLSI DESIGN-Overall Average of PO & PSO Attainment through Direct and InDirect tools														
	1	2	3	4	5	6	7	8	9	10	11	12	PSO1	PSO2
C603.1	1.94	0.97	2.90	1.94									2.90	
C603.2	1.78	2.67	1.78	0.89					0.89				2.67	
C603.3	1.79	1.79	2.68	0.89					0.89			0.89	2.68	0.89
C603.4	2.55	1.70	2.55	1.70								0.85	2.55	0.85
C603.5	1.91	2.87	2.87	1.91	0.96								1.91	
C603.6	1.76	1.76	2.64	2.64	2.64							0.88	1.76	0.88
Attainment	1.95	1.96	2.57	1.66	1.80				0.89			0.87	2.41	0.87
Mapping Value	2.17	2.17	2.83	1.83	2.00				1.00			1.00	2.67	1.00
Attainment %	90%	90%	91%	91%	90%				89%			87%	91%	87%



  
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ATTAINMENT CALCULATIONS OF COURSE OUTCOMES

Course Details

Course Code	18EC402
Course Name	SIGNALS AND SYSTEM
Academic Year	2019-2020
Semester	IV
Class	II year
Regulation	R2018
Batch	2018-2022

Course Outcomes(COs)

<b>After the completion of this course, students will be able to</b>	
C402.1	Acquire the knowledge of signal, system and its classifications
C402.2	Analyze the spectral characteristics of continuous-time periodic and aperiodic signals using Fourier analysis.
C402.3	Analyze the response of LTI system using convolution integral and LSI system using convolution.
C402.4	Analyze system properties based on impulse response and Fourier analysis.
C402.5	Apply Laplace transform and Z-transform for the analysis of continuous-time and discrete-time signals and systems.
C402.6	Understand the fundamental characteristic of Biomedical signals

Course outcome and Program Outcome Mapping

Correlation levels: 3-Substantial (High) 2-Moderate (Medium) 1 - Slight(Low)

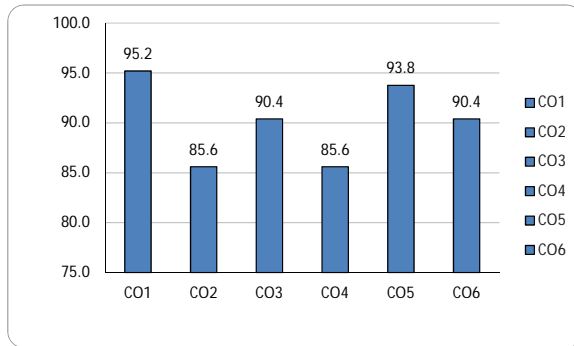
CO/PO/PSO-Matrix

CO/PO/PSO	COURSE OUTCOMES	Program Outcomes											Program Specific Outcomes			
		PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO 1	PSO 2	
C402.1	Acquire the knowledge of signal, system and its classifications	2	2	2	2	2									3	
C402.2	Analyze the spectral characteristics of continuous-time periodic and aperiodic signals using Fourier	2	2	2	2	2							2.00	3	1	
C402.3	Analyze the response of LTI system using convolution integral and LSI system using	2	2	2	3	3							1.00	3	1	
C402.4	Analyze system properties based on impulse response and Fourier analysis.	3	2	2	2	1							1.00	2	1	
C402.5	Apply Laplace transform and Z-transform for the analysis of continuous-time and discrete-time signals and systems.	3	2	2	2	1							1.00	3	1	
C402.6	Understand the fundamental characteristic of Biomedical signals	2	2	2	3	2								3		
Average		2.33	2.00	2.00	2.33	1.83							1.25	2.83	1.00	

  
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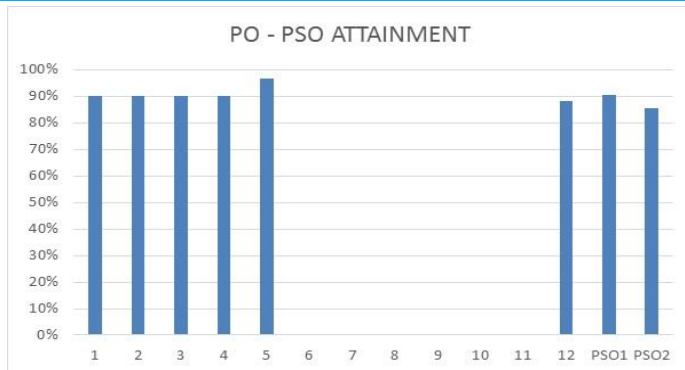
18EC402 - SIGNALS AND SYSTEMS

COURSE OUTCOMES ATTAINMENT											
Course Outcomes	CIA Attainment	Capstone Attainment	ESE Attainment	CES Attainment	Direct Attainment	Indirect Attainment	Course Outcomes Attainment	CO Attainment %	Attainment Status	Remedial Measures	
CO1	4.00	5.00	5.00	5.00	4.7	5.00	4.8	95.2	Attained	NIL	
CO2	2.00	5.00	5.00	5.00	4.1	5.00	4.3	85.6	Attained	NIL	
CO3	3.00	5.00	5.00	5.00	4.4	5.00	4.5	90.4	Attained	NIL	
CO4	2.00	5.00	5.00	5.00	4.1	5.00	4.3	85.6	Attained	NIL	
CO5	3.70	5.00	5.00	5.00	4.6	5.00	4.7	93.8	Attained	NIL	
CO6	3.00	5.00	5.00	5.00	4.4	5.00	4.5	90.4	Attained	NIL	



Overall Average of Attainment through Direct and Indirect tools

	1	2	3	4	5	6	7	8	9	10	11	12	PSO1	PSO2
CO1	1.90	1.90	1.90	1.90									2.86	
CO2	1.71	1.71	1.71	1.71	1.71							1.71	2.57	0.86
CO3	1.81	1.81	1.81	2.71	2.71							0.90	2.71	
CO4	2.57	1.71	1.71	1.71	0.86							0.86	1.71	0.86
CO5	2.81	1.88	1.88	1.88								0.94	2.81	
CO6	1.81	1.81	1.81	2.71	1.81								2.71	
Attainment	2.10	1.80	1.80	2.10	1.77							1.10	2.56	0.86
Mapping	2.33	2.00	2.00	2.33	1.83							1.25	2.83	1.00
Attainment	90%	90%	90%	90%	97%							88%	90%	86%



  
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**KRISHNA COLLEGE OF ENGINEERING AND TECHNOLOGY, KUNIAMUTHUR, COIMBATORE - 641  
DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING  
ATTAINMENT CALCULATIONS OF COURSE OUTCOMES**

**Course Details**

<b>Course Code</b>	18EC504
<b>Course Name</b>	MICROCONTROLLERS LABORATORY
<b>Academic Year</b>	2020-2021
<b>Semester</b>	V
<b>Class</b>	III
<b>Regulation</b>	R2018
<b>Batch</b>	2018-2022

**Course Outcomes(COs)**

**After the completion of this course, students will be able to**


C504.1	Understand the addressing modes of 8051
C504.2	Apply the interfacing procedures of 8051 with peripheral devices using 8051
C504.3	Evaluate the command word format for interfacing with peripherals
C504.4	Analyze the usage of Embedded C codes in microcontroller
C504.5	Synthesis and debug the codes using IAR embedded work bench
C504.6	Study of Keil Microvision

**Course outcome and Program Outcome Mapping**

Correlation levels: 3-Substantial (High)    2-Moderate (Medium)    1 - Slight(Low)

**CO/PO/PSO-Matrix**

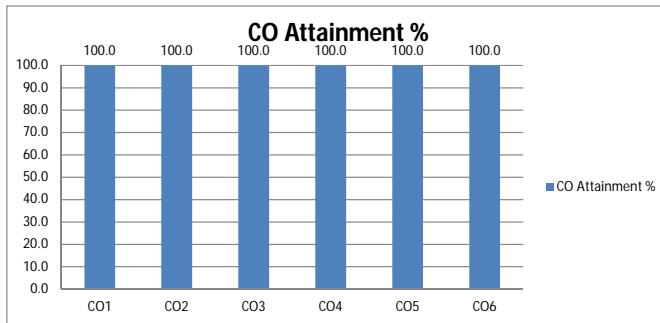
	1	2	3	4	5	6	7	8	9	10	11	12	PSO 1	PSO 2
C504.1	3	3	1	1					2				2	
C504.2	2	2	2	2					2				3	
C504.3	2	2	1	2					2				3	
C504.4	2	2	2	2					2			1	2	1
C504.5	2	2	2	2					2				3	
C504.6	2	3	1	2	3				2			1	3	1
<b>Mapping Value</b>	<b>2</b>	<b>2.333</b>	<b>1.667</b>	<b>2</b>	<b>3</b>				<b>2</b>			<b>1</b>	<b>2.667</b>	<b>1</b>

  
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18EC504 - MICROCONTROLLERS LABORATORY

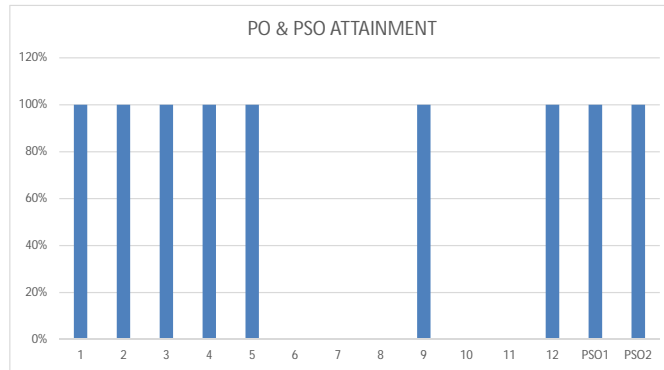
**COURSE OUTCOMES ATTAINMENT**

Course Outcomes	RAS Attainment	ESE Attainment	CES Attainment	Direct Attainment	Indirect Attainment	Course Outcomes Attainment	CO Attainment %	Attainment Status	Remedial Measures
CO1	5.00	5.00	5.00	5.0	5.00	5.0	100.0	Attained	NIL
CO2	5.00	5.00	5.00	5.0	5.00	5.0	100.0	Attained	NIL
CO3	5.00	5.00	5.00	5.0	5.00	5.0	100.0	Attained	NIL
CO4	5.00	5.00	5.00	5.0	5.00	5.0	100.0	Attained	NIL
CO5	5.00	5.00	5.00	5.0	5.00	5.0	100.0	Attained	NIL
CO6	5.00	5.00	5.00	5.0	5.00	5.0	100.0	Attained	NIL



**Overall Average of PO & PSO Attainment through Direct and Indirect tools**

	1	2	3	4	5	6	7	8	9	10	11	12	PSO1	PSO2
CO1	3.00	3.00	1.00	1.00					2.00				2.00	
CO2	2.00	2.00	2.00	2.00					2.00				3.00	
CO3	2.00	2.00	1.00	2.00					2.00				3.00	
CO4	2.00	2.00	2.00	2.00					2.00			1.00	2.00	1.00
CO5	2.00	2.00	2.00	2.00					2.00				3.00	
CO6	2.00	3.00	1.00	2.00	3.00				2.00			1.00	3.00	1.00
Attainment	2.17	2.33	1.50	1.83	3.00				2.00			1.00	2.67	1.00
Mapping	2.17	2.33	1.50	1.83	3.00				2.00			1.00	2.67	1.00
Attainment	100%	100%	100%	100%	100%				100%			100%	100%	100%



  
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