

**Manakula Vinayagar Institute of Technology**  
**Department of Electronics and Communication Engineering**  
**PO Attainment - Attained**  
**Batch 2018-2022**  
**REGULATION 2013-2014**

Course Code	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
C101	Mathematics – I	3	3	3	3								3		
C102	Physics	3	3	3	3		3						3		
C103	Chemistry	3	3	3			3	3					3		
C104	Basic Civil and Mechanical Engineering	3	3	3	3		3	3			3		3		
C105	Engineering Mechanics	3	3		3		3				3		3		
C106	Communicative English									3	3		3		
C107	Physics lab	3			3		3	3		3	3		3		
C108	Chemistry lab	3					3	3		3	3		3		
C109	Workshop Practice			3											
C110	Mathematics – II	3	3	3	3			3					3		
C111	Material Science	3	3	3			3	3					3		
C112	Environmental Science	3					3	3				3	3		
C113	Basic Electrical and Electronics Engineering	3	3	3			3	3				3	3		
C114	Engineering Thermodynamics	2	2	2	2								2		
C115	Computer Programming	2	2	2	2	2	2	2	2	2	2	2	2		
C116	Computer Programming Lab	3	3	3	3	3	3			3		3	3		
C11	Engineering Graphics	3	3												
C118	Basic Electrical & Electronics Lab	3	3				3	3		3	3	3	3		
C119	NSS / NCC *	3				3	3	3	3	3	3	3	3		
C201	Mathematics-III	1.99		1.44	0.66				0.43	0.14			0.73		
C202	Electrical Engineering	2.42	2.42						0.81						
C203	Data Structures and Object Oriented Programming	2.95	1.97			1.97							0.98	0.98	
C204	Electronic Devices and Circuits	1.41	1.59	0.97	2.12								2.12	1.49	1.4
C205	Circuit Theory	2.94	2.16	1.37	0.98					0.98				0.98	0.98
C206	Engineering Electromagnetics	2.69	1.77	1.77		0.17	0.35		0.17				0.88		
C207	Electrical Engineering Lab	2.95				2.95				1.96	1.96				1.96
C208	Data Structures and Object Oriented Programming	2.95	2.61								2.95				2.95
C209	Electronic Devices and Circuits Lab	2.9	2.92	2.9	2.92	1.45						0.96	0.96	2.93	
C210	Mathematics-IV	2.58	1.2			0.68							0.34		
C211	Electronic Circuits and Analysis	1.86	1.86			0.94							0.94		
C212	Signals and Systems	2.65	1.95	0.32		0.36					0.37		0.57		
C213	Linear and Digital Control Systems	2.93	1.96	0.78					0.39				0.78	0.97	

<b>C214</b>	Digital Circuits	2.19	0.9	0.36	0.18	0.72								2.74	
<b>C215</b>	Electronic Communication Systems	2				0.34			1.51		0.17	0.67	0.32		2.54
<b>C216</b>	Electronic Circuits Design Laboratory	2.92	1.93								1.98			2.95	
<b>C217</b>	Digital Circuits Laboratory	2.72	2.5								2.67				2.95
<b>C218</b>	Communication Laboratory-I	2.94				0.32					0.98			0.32	2.94
<b>C301</b>	Probability and Random Processes	2.75	2.2	2.2		0.37					0.37		0.9		
<b>C302</b>	Data Communication Networks	1.21	1.2	1.2		0.35									
<b>C303</b>	Microprocessors and Microcontrollers	1.46	1.3	0.65		0.32		0.32						0.34	
<b>C304</b>	System Design using Integrated Circuits	1.93	1.49	0.98									0.74	0.74	
<b>C305</b>	Transmission Lines and Waveguides	1.93									0.26				
<b>C306</b>	Consumer Electronics	1.75	1.56	0.78		0.39		0.39		0.36	0.78		0.39		
<b>C307</b>	Microprocessor and Microcontroller Lab	2.89	1.28	0.64		0.96								2.89	
<b>C308</b>	System Design using ICs Laboratory	2.92	0.97			1.94					0.98			1.94	
<b>C309</b>	Networks and Transmission Lines Lab	2.96	1.31				0.98				0.98				1.97
<b>C310</b>	General Proficiency -I									2.29	2.43		2.69		
<b>C311</b>	Digital Communication	1.2	0.86	0.51		0.51					0.86		2.59		2.59
<b>C312</b>	Wireless Communication	1.94	1.17	0.19			0.58	0.39	0.98		0.39		0.58		0.58
<b>C313</b>	Digital Signal Processing	2.61	1.2			0.68							0.34		2.59
<b>C314</b>	Antennas and Wave Propagation	1.69	1.12	0.78	0.93	0.64		1.76	0.64	0.92			0.55	0.46	1.52
<b>C315</b>	VLSI Design	2.47	0.37	0.18		0.38					0.19		0.76	0.76	
<b>C316</b>	Communication Lab – II	2.95	2.96			1.47				1.96	0.98	1.97			2.95
<b>C317</b>	Computer Networks Lab	2.95	1.96	1.96	1.96	2.95						0.98	0.98		1.96
<b>C318</b>	Digital Signal Processing Laboratory	2.95				2.95				1.97	1.96				1.97
<b>C319</b>	General Proficiency – II									2.39	2.35		2.81		
<b>C401</b>	Microwave and Optical Engineering	1.59	1.43	0.72		0.38		0.37							
<b>C402</b>	Embedded Systems	2.35	1.81	0.18		0.17		0.36			0.54		0.72	0.36	
<b>C403</b>	Digital Image Processing	1.7	0.85			0.91				0.47	0.42		0.5		0.47
<b>C404</b>	Medical Electronics	2.43	1.13			0.74								0.18	0.93
<b>C405</b>	Communication Lab - III	2.68	1.81								0.89				1.79
<b>C406</b>	Embedded Systems Lab	2.96	1.93	1.93		2.96					0.96			2.96	
<b>C407</b>	Seminar	2.55	2.57			1.63			1.72	2.35	2.42		1.62		
<b>C408</b>	Training /Industrial Visit	2.81						2.78	1.84	1.9	1.89		2.89		
<b>C409</b>	Project work-I	2.97	2.67	2.73		2.93		2.59		2.94	2.66	2.92			
<b>C410</b>	Professional Ethics								2.75						
<b>C411</b>	Industrial Management and Engineering Economics	2.97					1.98		0.99		0.99	2.98	2.97		
<b>C412</b>	Cellular Mobile Communication	2.22	0.93	0.37	0.18	0.63								0.18	0.92
<b>C413</b>	Satellite Communication System	1.9				0.32									2.8
<b>C414</b>	Advanced Communication Lab	2.17	0.72			0.22			0.72	0.72	0.72		0.72		0.72
<b>C415</b>	Comprehensive Viva	2.58	1.61								1.54		0.78		

<b>C416</b>	Project Work-II	2.86	2.95	2.74		2.57		1.86		2.73	2.86	2.1	2.61		
	Guest Lectures	2.83	2.83	2.87		2.84		2.84	2.83	2.83		2.85	2.83	2.82	2.86
	Workshops	2.58	2.58			2.58							2.58	2.88	2.21
	Industrial Visits	2.63	2.63			2.63	2.65	2.61				2.61	2.63	2.65	2.58
	Mini Projects	3	3	3	3	3	3			3	3	3	3	1.27	1.74
	Value added Courses	2.95	2.92			2.94							2.92	3.00	2.98
	Average of PO's ( direct Attainment )	2.56	2.04	1.72	2.11	1.41	2.50	2.19	1.39	2.08	1.68	2.38	1.92	1.60	1.99

**Indirect Attainment**

Program Exit Survey	3	2	3	3	2	3	2	3	2	3	2	3	3	3
Alumni survey	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Average Indirect attainment	3	2.5	3	3	2.5	3	2.5	3	2.5	3	2.5	3	3	3

	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>	<b>PSO1</b>	<b>PSO2</b>
<b>Target</b>	<b>2.11</b>	<b>1.84</b>	<b>1.65</b>	<b>1.82</b>	<b>1.51</b>	<b>2.00</b>	<b>1.90</b>	<b>1.45</b>	<b>1.83</b>	<b>1.60</b>	<b>1.95</b>	<b>1.72</b>	<b>1.60</b>	<b>1.79</b>
<b>PO Attainment ( 80% Direct + 20% Indirect )</b>	<b>2.65</b>	<b>2.13</b>	<b>1.98</b>	<b>2.29</b>	<b>1.63</b>	<b>2.60</b>	<b>2.26</b>	<b>1.71</b>	<b>2.16</b>	<b>1.94</b>	<b>2.40</b>	<b>2.13</b>	<b>1.88</b>	<b>2.20</b>

**Batch 2018-2022**

