

( Approved by AICTE, Affiliated to MGU / APJ Abdul Kalam Technological University, NAAC Accredited & ISO Certified Institution )

**1.3.2.1. Number of courses that include experiential learning through project work/field work/internship- 2018-19**

Sl No	Name of the course	No of students	Department	Date	Year	Duration
1	Advanced concrete technology	19	CE	21 Novemver	2017-18	6 Months
2	Civil Engineering drafting lab	17	CE	21 Novemver	2017-18	6 Months
3	CIVIL ENGINEERING PROJECT MANAGEMENT	7	CE	21 Novemver	2017-18	6 Months
4	Computer Aided Civil Engineering Lab	28	CE	21 Novemver	2017-18	6 Months
5	COMPUTER PROGRAMMING AND COMPUTATIONAL TECHNIQUES	6	CE	21 Novemver	2017-18	6 Months
6	Construction Technology	31	CE	21 Novemver	2017-18	6 Months
7	design of concrete structures	4	CE	21 Novemver	2017-18	6 Months
8	design of concrete structures I	4	CE	21 Novemver	2017-18	6 Months
9	design of concrete structures II	4	CE	21 Novemver	2017-18	6 Months
10	Design of hydraulic structures	5	CE	21 Novemver	2017-18	6 Months
11	design of steel structures	8	CE	21 Novemver	2017-18	6 Months
12	Design Project	91	CE	21 Novemver	2017-18	6 Months
13	Engineering mechanics	5	CE	21 Novemver	2017-18	6 Months
14	Environment & Pollution	8	CE	21 Novemver	2017-18	6 Months
15	Environmental Engineering I	30	CE	21 Novemver	2017-18	6 Months
16	Environmental Engineering II	8	CE	21 Novemver	2017-18	6 Months
17	Environmental Engineering Lab	20	CE	21 Novemver	2017-18	6 Months
18	Environmental Impaac Assessment	32	CE	21 Novemver	2017-18	6 Months
19	Fluid Mechanics lab	7	CE	21 Novemver	2017-18	6 Months
20	Fluid mechanics I	5	CE	21 Novemver	2017-18	6 Months
21	Fluid mechanics II	9	CE	21 Novemver	2017-18	6 Months
22	Geo environmental engineering	4	CE	21 Novemver	2017-18	6 Months
23	Geomatics	12	CE	21 Novemver	2017-18	6 Months
24	geotechnical engineering I	15	CE	21 Novemver	2017-18	6 Months
25	geotechnical engineering II	20	CE	21 Novemver	2017-18	6 Months
26	geotechnical engineering lab	8	CE	21 Novemver	2017-18	6 Months
27	Ground Improvement techniques	8	CE	21 Novemver	2017-18	6 Months
28	Introduction to Civil Engineering	6	CE	21 Novemver	2017-18	6 Months
29	Introduction to sustainable engineering	12	CE	21 Novemver	2017-18	6 Months
30	Material testing lab	14	CE	21 Novemver	2017-18	6 Months
31	Material testing lab II	6	CE	21 Novemver	2017-18	6 Months
32	Mechanics of solids	9	CE	21 Novemver	2017-18	6 Months
33	municipal solid waste management	4	CE	21 Novemver	2017-18	6 Months
34	Project	122	CE	21 Novemver	2017-18	6 Months
35	Quantity Surveying and Valuation	9	CE	21 Novemver	2017-18	6 Months
36	Seminar & Project Preliminary	125	CE	21 Novemver	2017-18	6 Months
37	Structural Analysis I	19	CE	21 Novemver	2017-18	6 Months
38	Structural Analysis II	8	CE	21 Novemver	2017-18	6 Months
39	Structural Analysis III	9	CE	21 Novemver	2017-18	6 Months

40	Survey lab	9 CE	21 November	2017-18	6 Months
41	Surveying	5 CE	21 November	2017-18	6 Months
42	Traffic Engineering and Management	16 CE	21 November	2017-18	6 Months
43	Transportation engineering I	31 CE	21 November	2017-18	6 Months
44	Transportation engineering II	22 CE	21 November	2017-18	6 Months
45	transportation engineering lab	16 CE	21 November	2017-18	6 Months
46	water resource engineering	8 CE	21 November	2017-18	6 Months
47	Min Project	8 CE	21 November	2017-18	6 Months
48	Project	8 CE	21 November	2017-18	6 Months
49	advanced Microprocessors and peripherals	6 CSE	21 November	2017-18	6 Months
50	ARTIFICIAL INTELLIGENCE	9 CSE	21 November	2017-18	6 Months
51	Client server and applications	4 CSE	21 November	2017-18	6 Months
52	Compiler construction	6 CSE	21 November	2017-18	6 Months
53	Compiler construction	4 CSE	21 November	2017-18	6 Months
54	Computer graphics lab	4 CSE	21 November	2017-18	6 Months
55	Computer Networks	5 CSE	21 November	2017-18	6 Months
56	computer organisation	5 CSE	21 November	2017-18	6 Months
57	Cryptography and Network Security	6 CSE	21 November	2017-18	6 Months
58	Data Structures and Algorithms	8 CSE	21 November	2017-18	6 Months
59	DATA STRUCTURES LAB	7 CSE	21 November	2017-18	6 Months
60	database Lab	7 CSE	21 November	2017-18	6 Months
61	Database Management Systems	16 CSE	21 November	2017-18	6 Months
62	Design and analysis algorithm	4 CSE	21 November	2017-18	6 Months
63	Design Project	64 CSE	21 November	2017-18	6 Months
64	digital signal processing	3 CSE	21 November	2017-18	6 Months
65	Distributed systems	4 CSE	21 November	2017-18	6 Months
66	Distributed systems	4 CSE	21 November	2017-18	6 Months
67	Embedded Systems	9 CSE	21 November	2017-18	6 Months
68	Hardware & Microprocessors lab	6 CSE	21 November	2017-18	6 Months
69	high performance computing	5 CSE	21 November	2017-18	6 Months
70	Internet computing	4 CSE	21 November	2017-18	6 Months
71	MOBILE COMPUTING	3 CSE	21 November	2017-18	6 Months
72	network lab	4 CSE	21 November	2017-18	6 Months
73	rueral networks	4 CSE	21 November	2017-18	6 Months
74	Object Oriented Design and Programming	20 CSE	21 November	2017-18	6 Months
75	object oriented modelling and design	5 CSE	21 November	2017-18	6 Months
76	OBJECT ORIENTED PROGRAMMING	12 CSE	21 November	2017-18	6 Months
77	operating systems lab	4 CSE	21 November	2017-18	6 Months
78	Principles of Database Design	5 CSE	21 November	2017-18	6 Months
79	Principles of programming language	8 CSE	21 November	2017-18	6 Months
80	Problem solving and computer Programming	4 CSE	21 November	2017-18	6 Months
81	Programming Lab	4 CSE	21 November	2017-18	6 Months
82	Project	80 CSE	21 November	2017-18	6 Months
83	SECURITY IN COMPUTING	4 CSE	21 November	2017-18	6 Months
84	signals and communication system	4 CSE	21 November	2017-18	6 Months
85	Software engineering	8 CSE	21 November	2017-18	6 Months
86	Software Engineering and Project Management	2 CSE	21 November	2017-18	6 Months
87	system software	4 CSE	21 November	2017-18	6 Months

88	Theory of computation	3	CSE	21 Novemver	2017-18	6 Months
89	WEB TechNOLOGIES	4	CSE	21 Novemver	2017-18	6 Months
90	Computational Intelligence	2	CSE	21 Novemver	2017-18	6 Months
91	Computer security and applied cryptography	2	CSE	21 Novemver	2017-18	6 Months
92	modern Computer Networks	2	CSE	21 Novemver	2017-18	6 Months
93	advanced data structuree and algorithms	2	CSE	21 Novemver	2017-18	6 Months
94	advanced database management	2	CSE	21 Novemver	2017-18	6 Months
95	web security	2	CSE	21 Novemver	2017-18	6 Months
96	Automata Theory and Computability	2	CSE	21 Novemver	2017-18	6 Months
97	big data processing	2	CSE	21 Novemver	2017-18	6 Months
98	web services	2	CSE	21 Novemver	2017-18	6 Months
99	wireless sensor network	3	CSE	21 Novemver	2017-18	6 Months
100	Social Network Analytics	1	CSE	21 Novemver	2017-18	6 Months
101	Distributed Computing Systems	2	CSE	21 Novemver	2017-18	6 Months
102	Operating System Design Concepts	1	CSE	21 Novemver	2017-18	6 Months
103	Wireless Sensor Networks	1	CSE	21 Novemver	2017-18	6 Months
104	Research Methodology	1	CSE	21 Novemver	2017-18	6 Months
105	Network Simulation Lab	1	CSE	21 Novemver	2017-18	6 Months
106	Wireless Sensor Networks	1	CSE	21 Novemver	2017-18	6 Months
107	Bioinformatics	1	CSE	21 Novemver	2017-18	6 Months
108	Advanced Computing Lab	1	CSE	21 Novemver	2017-18	6 Months
109	Mini Project	10	CSE	21 Novemver	2017-18	6 Months
110	Project (Phase - I)	10	CSE	21 Novemver	2017-18	6 Months
111	Wireless Communication	7	ECE	21 Novemver	2017-18	6 Months
112	VLSI Technology	1	ECE	21 Novemver	2017-18	6 Months
113	VLSI Design	4	ECE	21 Novemver	2017-18	6 Months
114	VLSI & Embedded Systems Lab	12	ECE	21 Novemver	2017-18	6 Months
115	SIGNALS & SYSTEMS	1	ECE	21 Novemver	2017-18	6 Months
116	Seminar II	1	ECE	21 Novemver	2017-18	6 Months
117	PROJECTWORK	84	ECE	21 Novemver	2017-18	6 Months
118	Project (Phase-II)	1	ECE	21 Novemver	2017-18	6 Months
119	PROJECT (PHASE II)	3	ECE	21 Novemver	2017-18	6 Months
120	PROJECT (PHASE I)	4	ECE	21 Novemver	2017-18	6 Months
121	PROJECT	84	ECE	21 Novemver	2017-18	6 Months
122	Multicarrier and MIMO Communication Systems	2	ECE	21 Novemver	2017-18	6 Months
123	MINI PROJECT	4	ECE	21 Novemver	2017-18	6 Months
124	MICROPROCESSORS AND APPLICATIONS	6	ECE	21 Novemver	2017-18	6 Months
125	MICROPROCESSOR & MICROCONTROLLER LAB	8	ECE	21 Novemver	2017-18	6 Months
126	MICROCONTROLLERS AND APPLICATIONS	5	ECE	21 Novemver	2017-18	6 Months
127	LOGIC CIRCUIT DESIGN LAB	4	ECE	21 Novemver	2017-18	6 Months
128	LOGIC CIRCUIT DESIGN	5	ECE	21 Novemver	2017-18	6 Months
129	INTRODUCTION TO SUSTAINABLE ENGINEERING	10	ECE	21 Novemver	2017-18	6 Months
130	INTRODUCTION TO SUSTAINABLE ENGINEERING	10	ECE	21 Novemver	2017-18	6 Months
131	INTRODUCTION TO ELECTRONIC SCIENCE	18	ECE	21 Novemver	2017-18	6 Months
132	High Frequency Circuits Design	2	ECE	21 Novemver	2017-18	6 Months
133	ENGINEERING PHYSICS	5	ECE	21 Novemver	2017-18	6 Months
134	Embedded Systems	9	ECE	21 Novemver	2017-18	6 Months

135	Embedded Operating System & RTOS	1	ECE	21 Novemver	2017-18	6 Months
136	ELECTRONIC ENGINEERING WORKS HOP	19	ECE	21 Novemver	2017-18	6 Months
137	Electronic Instrumentation	5	ECE	21 Novemver	2017-18	6 Months
138	ELECTRONIC DEVICES & CIRCUITS LAB	23	ECE	21 Novemver	2017-18	6 Months
139	ELECTRONIC DESIGN AUTOMATION LAB	1	ECE	21 Novemver	2017-18	6 Months
140	ELECTRONIC CIRCUITS	3	ECE	21 Novemver	2017-18	6 Months
141	ELECTRIC DRIVES AND CONTROL LAB	4	ECE	21 Novemver	2017-18	6 Months
142	ELECTRIC DRIVES & CONTROL	4	ECE	21 Novemver	2017-18	6 Months
143	ELECTRICAL ENGG WORKSHOP	3	ECE	21 Novemver	2017-18	6 Months
144	DIGITAL ELECTRONICS LAB	7	ECE	21 Novemver	2017-18	6 Months
145	DIGITAL COMMUNICATION TECHNIQUES	4	ECE	21 Novemver	2017-18	6 Months
146	Design with ARM microcontrollers	1	ECE	21 Novemver	2017-18	6 Months
147	DESIGN AND ENGG	6	ECE	21 Novemver	2017-18	6 Months
148	CONTROL SYSTEMS	4	ECE	21 Novemver	2017-18	6 Months
149	COMPUTER ORGANIZATION	4	ECE	21 Novemver	2017-18	6 Months
150	Communication Engineering Lab	2	ECE	21 Novemver	2017-18	6 Months
151	CMOS VLSI Design	1	ECE	21 Novemver	2017-18	6 Months
152	CIVIL ENGG Workshop	3	ECE	21 Novemver	2017-18	6 Months
153	BASICS OF MECHANICAL ENGINEERING	3	ECE	21 Novemver	2017-18	6 Months
154	BASICS OF ELECTRICAL ENGG	6	ECE	21 Novemver	2017-18	6 Months
155	Analytical Foundation for Communication Engineering	2	ECE	21 Novemver	2017-18	6 Months
156	ANALOG INTEGRATED CIRCUITS	6	ECE	21 Novemver	2017-18	6 Months
157	Algebraic Coding Theory	2	ECE	21 Novemver	2017-18	6 Months
158	Advanced Digital Design	1	ECE	21 Novemver	2017-18	6 Months
159	Advanced Digital Communication Techniques	2	ECE	21 Novemver	2017-18	6 Months
160	Algebraic Coding Theory	2	ECE	21 Novemver	2017-18	6 Months
161	Advanced Digital Design	1	ECE	21 Novemver	2017-18	6 Months
162	Advanced Digital Communication Techniques	2	ECE	21 Novemver	2017-18	6 Months
163	Advanced Communication Networks	2	ECE	21 Novemver	2017-18	6 Months
164	ADVANCED COMMUNICATION LAB	4	ECE	21 Novemver	2017-18	6 Months
165	Advanced CMOS VLSI	1	ECE	21 Novemver	2017-18	6 Months
166	Adaptive Signal Processing Techniques	2	ECE	21 Novemver	2017-18	6 Months
167	Modern control Theory	2	EEE	21 Novemver	2017-18	6 Months
168	Control and Simulation Lab	8	EEE	21 Novemver	2017-18	6 Months
169	Design & Engineering	13	EEE	21 Novemver	2017-18	6 Months
170	Electrical CAD Lab	19	EEE	21 Novemver	2017-18	6 Months
171	Electrical Power Transmission	4	EEE	21 Novemver	2017-18	6 Months
172	Introduction to Electrical Engineering	4	EEE	21 Novemver	2017-18	6 Months
173	Synchronous Machines	3	EEE	21 Novemver	2017-18	6 Months
174	Power system Analysis	4	EEE	21 Novemver	2017-18	6 Months
175	Advanced Control Theory	3	EEE	21 Novemver	2017-18	6 Months
176	Analog Electronic Circuits	38	EEE	21 Novemver	2017-18	6 Months
177	Basic Electrical Workshop	4	EEE	21 Novemver	2017-18	6 Months
178	Circuits & Networks	48	EEE	21 Novemver	2017-18	6 Months

179	Circuits and Measurements Lab	2	EEE	21 Novemver	2017-18	6 Months
180	Communication Engineering	16	EEE	21 Novemver	2017-18	6 Months
181	Computer Networks	4	EEE	21 Novemver	2017-18	6 Months
182	Computer Programming	38	EEE	21 Novemver	2017-18	6 Months
183	Computer Programming Lab	38	EEE	21 Novemver	2017-18	6 Months
184	DC Machines and Transformers	5	EEE	21 Novemver	2017-18	6 Months
185	Design Project	17	EEE	21 Novemver	2017-18	6 Months
186	Digital Circuits and Embedded Systems Lab	5	EEE	21 Novemver	2017-18	6 Months
187	Digital Electronics And Logic Design	19	EEE	21 Novemver	2017-18	6 Months
188	Distributed Power Systems	5	EEE	21 Novemver	2017-18	6 Months
189	Drives and Control	14	EEE	21 Novemver	2017-18	6 Months
190	Electric Drives	2	EEE	21 Novemver	2017-18	6 Months
191	Electrical Machines Lab I	5	EEE	21 Novemver	2017-18	6 Months
192	Electrical Machines Lab II	8	EEE	21 Novemver	2017-18	6 Months
193	Electrical Power Transmission	5	EEE	21 Novemver	2017-18	6 Months
194	Electrical system Design	5	EEE	21 Novemver	2017-18	6 Months
195	Electromagnetics	1	EEE	21 Novemver	2017-18	6 Months
196	Electronic Circuits Lab	38	EEE	21 Novemver	2017-18	6 Months
197	Electronic communication	4	EEE	21 Novemver	2017-18	6 Months
198	Engineering Physics	38	EEE	21 Novemver	2017-18	6 Months
199	Engineering Physics Lab	38	EEE	21 Novemver	2017-18	6 Months
200	High Voltage Engineering	5	EEE	21 Novemver	2017-18	6 Months
201	HVDC	3	EEE	21 Novemver	2017-18	6 Months
202	Linear Control Systems	2	EEE	21 Novemver	2017-18	6 Months
203	Material Science	38	EEE	21 Novemver	2017-18	6 Months
204	Measurements And Instrumentation	33	EEE	21 Novemver	2017-18	6 Months
205	Microprocessor and Embedded Systems	9	EEE	21 Novemver	2017-18	6 Months
206	Power Electronics	13	EEE	21 Novemver	2017-18	6 Months
207	Power Electronics and Drives Lab	3	EEE	21 Novemver	2017-18	6 Months
208	Power Generation, Transmission and Protection	3	EEE	21 Novemver	2017-18	6 Months
209	Power Quality	2	EEE	21 Novemver	2017-18	6 Months
210	Power System Analysis	3	EEE	21 Novemver	2017-18	6 Months
211	Probability Distributions, Transforms and Numerical Methods	6	EEE	21 Novemver	2017-18	6 Months
212	Project	38	EEE	21 Novemver	2017-18	6 Months
213	Project Phase I	38	EEE	21 Novemver	2017-18	6 Months
214	Signals and Systems	2	EEE	21 Novemver	2017-18	6 Months
215	Switch gear and protection	4	EEE	21 Novemver	2017-18	6 Months
216	Switched Mode Power Converters	3	EEE	21 Novemver	2017-18	6 Months
217	Synchronous And Induction Machines	7	EEE	21 Novemver	2017-18	6 Months
218	Systems and Control Lab	11	EEE	21 Novemver	2017-18	6 Months
219	Applications of Special Electrical Machines	3	EEE	21 Novemver	2017-18	6 Months
220	Computer Applications in Power Systems	3	EEE	21 Novemver	2017-18	6 Months
221	Elective - I Electric Drive Systems	3	EEE	21 Novemver	2017-18	6 Months
222	Embedded Controllers for Power Convertors	2	EEE	21 Novemver	2017-18	6 Months

223	Facts & Power Quality	4	EEE	21 Novemver	2017-18	6 Months
224	High Voltage DC Transmission	3	EEE	21 Novemver	2017-18	6 Months
225	Industrial Control Electronics	3	EEE	21 Novemver	2017-18	6 Months
226	Industrial Training	2	EEE	21 Novemver	2017-18	6 Months
227	Main Project	2	EEE	21 Novemver	2017-18	6 Months
228	Mini Project	3	EEE	21 Novemver	2017-18	6 Months
229	Modelling and Analysis of Electrical Machines	3	EEE	21 Novemver	2017-18	6 Months
230	Optimization Techniques for Engineering Applications	2	EEE	21 Novemver	2017-18	6 Months
231	Power Electronic Devices & Circuits	2	EEE	21 Novemver	2017-18	6 Months
232	Power Electronics Lab	4	EEE	21 Novemver	2017-18	6 Months
233	Power System Dynamics and Stability	1	EEE	21 Novemver	2017-18	6 Months
234	Power System Operation and Control	3	EEE	21 Novemver	2017-18	6 Months
235	Power Systems Simulation Lab	7	EEE	21 Novemver	2017-18	6 Months
236	Project Phase 1	2	EEE	21 Novemver	2017-18	6 Months
237	Renewable Energy Systems	2	EEE	21 Novemver	2017-18	6 Months
238	Research Methodology	2	EEE	21 Novemver	2017-18	6 Months
239	Switched Mode Power Converters	2	EEE	21 Novemver	2017-18	6 Months
240	Advanced Machine Tools Lab	4	ME	21 Novemver	2017-18	6 Months
241	Advanced Manufacturing Technology	2	ME	21 Novemver	2017-18	6 Months
242	Advanced Mechanics of Solids	1	ME	21 Novemver	2017-18	6 Months
243	Advanced Metal Joining	2	ME	21 Novemver	2017-18	6 Months
244	Basics of Civil Engineering	1	ME	21 Novemver	2017-18	6 Months
245	Basics of Electrical Engineering	1	ME	21 Novemver	2017-18	6 Months
246	Basics of Electronics Engineering	1	ME	21 Novemver	2017-18	6 Months
247	Business Mathematics	1	ME	21 Novemver	2017-18	6 Months
248	Business Practice and Industrial Economics	1	ME	21 Novemver	2017-18	6 Months
249	Calculus	1	ME	21 Novemver	2017-18	6 Months
250	Civil Engineering Workshop	1	ME	21 Novemver	2017-18	6 Months
251	Computer Aided Design and Analysis	2	ME	21 Novemver	2017-18	6 Months
252	Computer Aided Machine Drawing Lab	2	ME	21 Novemver	2017-18	6 Months
253	Computer Programming & Numerical Methods	2	ME	21 Novemver	2017-18	6 Months
254	Computer Aided Design and Analysis Lab	2	ME	21 Novemver	2017-18	6 Months
255	Design and Engineering	1	ME	21 Novemver	2017-18	6 Months
256	Design of Machine Elements	74	ME	21 Novemver	2017-18	6 Months
257	Design of Transmission Elements	16	ME	21 Novemver	2017-18	6 Months
258	Design Project	2	ME	21 Novemver	2017-18	6 Months
259	Differential Equations	1	ME	21 Novemver	2017-18	6 Months
260	Dynamics of Machinery	2	ME	21 Novemver	2017-18	6 Months
261	Dynamics of Machines	12	ME	21 Novemver	2017-18	6 Months
262	Electrical & Electronics Lab	2	ME	21 Novemver	2017-18	6 Months
263	Electrical Drives & Control for Automation	2	ME	21 Novemver	2017-18	6 Months
264	Electrical Engineering Workshop	1	ME	21 Novemver	2017-18	6 Months
265	Electronics Engineering Workshop	2	ME	21 Novemver	2017-18	6 Months
266	Engineering Chemistry	1	ME	21 Novemver	2017-18	6 Months
267	Engineering Chemistry Lab	1	ME	21 Novemver	2017-18	6 Months
268	Engineering Graphics	1	ME	21 Novemver	2017-18	6 Months
269	Engineering Mechanics	1	ME	21 Novemver	2017-18	6 Months
270	Engineering Physics	1	ME	21 Novemver	2017-18	6 Months
271	Engineering Physics Lab	1	ME	21 Novemver	2017-18	6 Months
272	Financial Management and Acing	2	ME	21 Novemver	2017-18	6 Months

273	Fluid Machinery	2	ME	21 Novemver	2017-18	6 Months
274	Fluid Mechanics & Machines Lab	2	ME	21 Novemver	2017-18	6 Months
275	Gas Dynamics & Jet Propulsion	12	ME	21 Novemver	2017-18	6 Months
276	Heat & Mass Transfer	2	ME	21 Novemver	2017-18	6 Months
277	Human Resource Management	2	ME	21 Novemver	2017-18	6 Months
278	Industrial Engineering	4	ME	21 Novemver	2017-18	6 Months
279	Industrial Engineering Lab	1	ME	21 Novemver	2017-18	6 Months
280	Industrial Safety	8	ME	21 Novemver	2017-18	6 Months
281	Industrial Training	2	ME	21 Novemver	2017-18	6 Months
282	Introduction to Mechanical Engineering Sciences	1	ME	21 Novemver	2017-18	6 Months
283	Knowledge Management	1	ME	21 Novemver	2017-18	6 Months
284	Linear Algebra & Complex Analysis	2	ME	21 Novemver	2017-18	6 Months
285	Machine Tools & Digital Manufacturing	2	ME	21 Novemver	2017-18	6 Months
286	Manufacturing Technology	2	ME	21 Novemver	2017-18	6 Months
287	Manufacturing Technology Lab I	2	ME	21 Novemver	2017-18	6 Months
288	Manufacturing Technology Lab II	2	ME	21 Novemver	2017-18	6 Months
289	Marketing Managaement	2	ME	21 Novemver	2017-18	6 Months
290	Material Testing Lab	2	ME	21 Novemver	2017-18	6 Months
291	Materials & Supply Chain Management	1	ME	21 Novemver	2017-18	6 Months
292	Mechanical Engineering Workshop	1	ME	21 Novemver	2017-18	6 Months
293	Mechanical Measurements Lab	24	ME	21 Novemver	2017-18	6 Months
294	Mechanical Systems Lab	4	ME	21 Novemver	2017-18	6 Months
295	Mechanics of Fluids	2	ME	21 Novemver	2017-18	6 Months
296	Mechanics of Machinery	2	ME	21 Novemver	2017-18	6 Months
297	Mechanics of Solids	2	ME	21 Novemver	2017-18	6 Months
298	Metallurgy and Materials Engineering	2	ME	21 Novemver	2017-18	6 Months
299	Metrology and Instrumentation	2	ME	21 Novemver	2017-18	6 Months
300	Non Destructive Testing	22	ME	21 Novemver	2017-18	6 Months
301	Operations Management	4	ME	21 Novemver	2017-18	6 Months
302	Organizational Behaviour	3	ME	21 Novemver	2017-18	6 Months
303	Plant Engineering & Maintanance	8	ME	21 Novemver	2017-18	6 Months
304	Practical Project Management	2	ME	21 Novemver	2017-18	6 Months
305	Probability Distributions, Transforms and Numerical Methods	2	ME	21 Novemver	2017-18	6 Months
306	Production Engineering	8	ME	21 Novemver	2017-18	6 Months
307	Project	188	ME	21 Novemver	2017-18	6 Months
308	Project (Phase 1)	7	ME	21 Novemver	2017-18	6 Months
309	Project (Phase 2)	7	ME	21 Novemver	2017-18	6 Months
310	Quality Management	3	ME	21 Novemver	2017-18	6 Months
311	Quantitative Techniques	3	ME	21 Novemver	2017-18	6 Months
312	Refrigeration & Air Conditioning	12	ME	21 Novemver	2017-18	6 Months
313	Research Methodology	3	ME	21 Novemver	2017-18	6 Months
314	Seminar	8	ME	21 Novemver	2017-18	6 Months
315	Thermal Engineering	2	ME	21 Novemver	2017-18	6 Months
316	Thermal Engineering Lab	2	ME	21 Novemver	2017-18	6 Months
317	Thermodynamics	2	ME	21 Novemver	2017-18	6 Months
318	Total Quality Management	1	ME	21 Novemver	2017-18	6 Months
319	Work System Design	1	ME	21 Novemver	2017-18	6 Months
320	Brand Management	4	MBA	21 Novemver	2017-18	6 Months
321	BUSINESS RESEARCH METHODS	57	MBA	21 Novemver	2017-18	6 Months
322	Bussiness Communication	1	MBA	21 Novemver	2017-18	6 Months
323	COMMERCIAL BANKING SYSTEM	9	MBA	21 Novemver	2017-18	6 Months
324	Comprehensive project	57	MBA	21 Novemver	2017-18	6 Months
325	CONSUMER BEHAVIOUR	9	MBA	21 Novemver	2017-18	6 Months
326	CORPORATE TAXATION	18	MBA	21 Novemver	2017-18	6 Months
327	ENTREPRENEURSHIP	38	MBA	21 Novemver	2017-18	6 Months
328	Financial management 1	10	MBA	21 Novemver	2017-18	6 Months
329	FINANCIAL MARKETS & SERVICES	9	MBA	21 Novemver	2017-18	6 Months
330	Human Resourse Analytics	4	MBA	21 Novemver	2017-18	6 Months

331	Human Resourse Management	21	MBA	21 Novemver	2017-18	6 Months
332	INTEGRATED MARKETING COMMUNICATION	9	MBA	21 Novemver	2017-18	6 Months
333	Internship	55	MBA	21 Novemver	2017-18	6 Months
334	Management Information Sstem	1	MBA	21 Novemver	2017-18	6 Months
335	Managerial Economics	1	MBA	21 Novemver	2017-18	6 Months
336	Marketing Management 1	8	MBA	21 Novemver	2017-18	6 Months
337	Operations management	9	MBA	21 Novemver	2017-18	6 Months
338	Organizational Behaviour 2	9	MBA	21 Novemver	2017-18	6 Months
339	Performance Management	11	MBA	21 Novemver	2017-18	6 Months
340	Quatitative Techniques	1	MBA	21 Novemver	2017-18	6 Months
341	Retail Marketing	9	MBA	21 Novemver	2017-18	6 Months
342	SALES & DISTRIBUTION MANAGEMENT	9	MBA	21 Novemver	2017-18	6 Months
343	Security Analysis & Portfolio Management	8	MBA	21 Novemver	2017-18	6 Months
344	SERVICES MARKETING	14	MBA	21 Novemver	2017-18	6 Months
345	Soft Skills I	1	MBA	21 Novemver	2017-18	6 Months
346	Soft Skills II	1	MBA	21 Novemver	2017-18	6 Months
347	Soft Skills III	1	MBA	21 Novemver	2017-18	6 Months
348	strategic Financial Management	17	MBA	21 Novemver	2017-18	6 Months
349	Strategic Marketing	13	MBA	21 Novemver	2017-18	6 Months

  
 PRINCIPAL  
 MANGALAM COLLEGE OF ENGINEERING  
 Ettimondur





38  
 THE FERTILISERS AND CHEMICALS TRAVANCORE LIMITED  
 (a part of India's public sector)

Telephone: 0404 - 2567583, 2556750, 2559621,  
 2567423, 2567300, 2567467, 2567424, 2567798  
 E-mail: [fact@factltd.com](mailto:fact@factltd.com)

CERTIFIED 13/06/2017

03.07.2017

CERTIFICATE

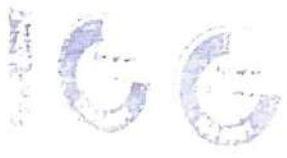
That Mr. ARAVIND, BTech (Mechanical Engineering) student of Mangalam College of Engineering, Kozhikode, has successfully completed his Internship Training in FACT Ltd., Udyogamandal, during the period from 25<sup>th</sup> June 2017 to 03<sup>rd</sup> July 2017.

M. V. ...  
 Sr. Manager / Deptt

  
 PRINCIPAL  
 MANGALAM COLLEGE OF ENGINEERING  
 Ettumanoor



पंजीकृत कार्यालय : एलूर, उद्योगमंडल  
 Regd. Office: Eloor, Udyogamandal



CIN U75209KL2003PTC016224  
TIN 32050741825  
GST 32050741825C



**Toms Pipes Private Limited**

26.07.2017

CERTIFICATE

*This is to certify that Mr. Jithin George, second semester B.Tech (Mechanical) student of Mangalam College of Engineering, Ettumanoor, has successfully completed his Internship under the guidance of Ms. Regina Varghese, at our organization during the period from 20.07.2017 to 26.07.2017.*

*We wish him all the best.*

For Toms Pipes Pvt. Ltd,

Authorised Signatory



PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Mfrs. of PVC Water Pipes Conduits and Fittings

Regd. Off: Door No. 6/305, Vattoli, Chelhimattom Road, Eravuchira P.O., Thottackad, Kottayam, Kerala - PIN 686 539, INDIA  
Factory: Veroor Industrial Estate, Industrial Nagar P.O., Changanacherry, Kottayam, Kerala - 686 106

THIRUVANANTHAPURAM REGIONAL CO-OPERATIVE  
MILK PRODUCER'S UNION LTD.  
PATHANAMTHITTA DAIRY

(An ISO 22000:2005 Certified Dairy)

Mammoodu Ju., Nariyapuram P.O., Pathanamthitta-689513

Ph: (Office) : 0468 2350089, 2350099, 2355990, 9447287190

TIN No : 32030474207

Fax : 0468-2350801, E-mail : milmapta@gmail.com

CST No : 32030474207 C

No. PD/HRD/PROJECT/2017-18 / 78

15.07.2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Thejus S, 2<sup>nd</sup> semester Mechanical Engineering student of Mangalam College of Engineering, Kottayam had successfully completed Internship in Pathanamthitta Dairy during the period from 06.07.2017 to 10.07.2017 as part of his academic Curriculum.

We wish all success in his future endeavors.



  
Personnel Officer  
Pathanamthitta Dairy

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Head Office : Thiruvananthapuram Regional Co-operative Milk Producer's Union Limited  
Ksheera Bhavan, Pattom, Thiruvananthapuram-695 004  
Ph: 2447109, 2446845, Fax : 0471-2449567

THIRUVANANTHAPURAM REGIONAL CO-OPERATIVE  
MILK PRODUCER'S UNION LTD.  
PATHANAMTHITTA DAIRY

(An ISO 22000:2005 Certified Dairy)

Mammoodu Jn., Nariyapuram P.O., Pathanamthitta-689513

Ph: (Office) : 0468 2350089, 2350099, 2355990, 9447287190 TIN No: 32030474207

Fax : 0468-2350801, E-mail : milmapta@gmail.com CST No: 32030474207 C

No. PD/HRD/PROJECT/2017-18| 577

15.07.2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Sam M Mathew, 2<sup>nd</sup> semester Mechanical Engineering student of Mangalam College of Engineering, Kottayam had successfully completed Internship in Pathanamthitta Dairy during the period from 06.07.2017 to 10.07.2017 as part of his academic Curriculum.

We wish all success in his future endeavors.



  
Personnel Officer  
Pathanamthitta Dairy

  
MANGALAM COLLEGE OF ENGINEERING  
KOTTAYAM

Head Office

Thiruvananthapuram Regional Co-operative Milk Producer's Union Limited  
Ksheera Bhavan, Pattom, Thiruvananthapuram-695 004  
Ph: 2447109, 2446845, Fax: 0471-2449567

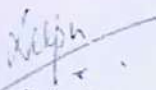
TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Rishikesh Sharma, student of Mechanical Engineering at Mangalam College of Engineering, had undergone an internship training at our Changanassery branch from June 19, 2017 to June 28, 2017.

He had successfully completed all assignments allotted to him and he was found sincere, hard working and punctual.

We wish him all the best.

For Mgf Motors Pvt Ltd,



Deepa Rajesh  
Officer- Human Resource



PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



**Kerala Automobiles Limited**  
(Govt. of Kerala Undertaking)

KAL/GAD-27/2017/518

04/07/2017

**CERTIFICATE**

This is to certify that the 86Nos, IIIrd Semester B. Tech Mechanical Engineering students of Mangalam College of Engineering Mangalam Hills, Vettimukal P. O. Ettumanoor, Kottayam as per the list attached have completed their industrial visit on 04/07/2017 in Kerala Automobiles Limited, in partial fulfillment of their course.

Asst. Manager (G&A) (i/c)



PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Aralumoodu P.O., Thiruvananthapuram- 695 123  
Tel: (91-0471)-2229100, 2229111, Fax: (91-0471)-2222640, 2229108  
E-mail : kal@dataone.in, www.keralaautomobilesltd.com



List of Students

1	AASISH PRASAD				
2	ADARSH BIJU	32	ARJUN SALIM	63	NAVEEN VARGHESE
3	AJAY P	33	ARUN S PANICKER	64	NOAH MATHEW
4	AJEESHA A L	34	ASHOK KUMAR A	65	RISHIKESH SHARMA
5	AJITH KUMAR SAJI	35	ASWIN ANIRUDHAN	66	RONY FRANCIS
6	AJO ANTONY	36	BHADRADEVI P J	67	S VENUGOPAL
7	AKASH V	37	BIBIN P SUNNY	68	SABIN SABU
8	AKHIL M NAIR	38	CHRISTY V MATHEW	69	SABIN V SAJAN
9	AKHIL P JOHNSON	39	DEVANAND S	70	SACIIN VARGHESE
10	AKHIL S	40	DINU N CHACKO	71	SACHU SEBASTIAN
11	AKHIL TOMY	41	FREDY ANTONY	72	SAJITH S K
12	AKSHAY LAL	42	GOKUL KRISHNA	73	SAM M MATHEW
13	AKSHAY M KUMAR	43	GOKUL KUMAR G	74	SAM T CHANDY
14	ALBRET P MICHAEL	44	GOUTHAM BOSE	75	SEBIN BABYCHAN
15	ALBIN JOSEPH	45	HARIKRISHNAN K S	76	SHARNAD K V
16	ALEN BENNY	46	HARIKRISHNAN S	77	SHINCE VARGHESE
17	AMAL JOY	47	HARISANKAR K S	78	SIJIN M JOSEPH
18	AMAL SURESH	48	JAYAKRISHNAN P T	79	SIRIL C THOMAS
19	AMAL SURESH	49	JIKKU ANTONY	80	SREERAJ K S
20	AMAL TOM MATHEW	50	JITHIN GEORGE	81	SREESANKAR P
21	AMITH GEORGE JOSEPH	51	JITHIN V DEVASIA	82	SURAJ LOUIS THOMAS
22	ANANDAPADMANABHAN S	52	JOSEMON SUNNY	83	THEJAS S
23	ANANADHU M	53	JOSEPH MATHEW	84	TOBIN ABRAHAM
24	ANANADU BALACHANDRAN	54	JOSH THOMAS	85	VIMAL RAJ
25	ANANDU GOPAN	55	JOSTIN THOMAS	86	VISHNUDAST
26	ANIL K THOMAS	56	KIRAN RAJ		
27	ANSHID M K	57	KURIYAN MANI		
28	ANSHU P BIJU	58	LEO V LALAPAN		
29	ARAVIND PANICKER R	59	MITHUN K THOMAS		
30	ARAVIND R	60	MITHUN MATHEW		
31	ANANADU BALACHANDRAN	61	MOTI VARKY RAJAN		
32		62	NANDU M		



PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



26.07.2017

CERTIFICATE

This is to certify that Mr. Sebin Babychan, second semester B.Tech (Mechanical) student of Mangalam College of Engineering, Ettumanoor, has successfully completed his Internship under the guidance of Ms. Regina Varghese, at our organization during the period from 20.07.2017 to 26.07.2017.

We wish him all the best.

For Toms Pipes Pvt. Ltd,

Authorised Signatory



Mfrs. of PVC Water Pipes Conduits and Fittings

A  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor





26.07.2017

CERTIFICATE

This is to certify that Mr. Sebin Babychan, second semester B.Tech (Mechanical) student of Mangalam College of Engineering, Ettumanoor, has successfully completed his Internship under the guidance of Ms. Regina Varghese, at our organization during the period from 20.07.2017 to 26.07.2017.

We wish him all the best.

For Toms Pipes Pvt. Ltd.

Authorised Signatory



Mfrs. of PVC Water Pipes Conduits and Fittings

Regd.Off: Door No. 6/305, Vattoli, Chethimattom Road, Eravuchira P.O., Thottackad, Kottayam, Kerala - PIN 686 539, INDIA

Factory: Veroor Industrial Estate, Industrial Nagar P.O., Changanacherry, Kottayam, Kerala - 686 406

Tel: +91 481 2724414, Fax: 272 4806. Email: tomspipes1@gmail.com, Web: www.tomspipes.com

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

18p-20



**KERALA STATE ROAD TRANSPORT CORPORATION**  
Office of the Works Manager,  
Regional Workshop, Mavelikara - 690 101  
Mappuzha (Dist.), Phone : 0479 - 230 2409  
e-mail : [rwm@kerala.gov.in](mailto:rwm@kerala.gov.in)

G2-351/17 / RHM/K-1

24-07-2017

CERTIFICATE

Certified that Mr. Albert P Michael, a student of 3rd Semester B.Tech Mechanical Engineering Course at Mangalam College of Engineering, Ettumanoor, Kottayam, Kerala has undergone an Industrial Training successfully at the Regional Workshop of Kerala State Road Transport Corporation, Mavelikara from 19-07-2017 to 24-07-2017 (5 working days).

During the training his work and conduct were good.



  
WORKS MANAGER  
P

①

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

THIRUVANANTHAPURAM REGIONAL CO-OPERATIVE  
MILK PRODUCER'S UNION LTD.  
PATHANAMTHITTA DAIRY

(An ISO 22000:2005 Certified Dairy)

Mammoodu Jn., Nariyapuram P.O., Pathanamthitta-689513

Ph: (Office) : 0468 2350089, 2350099, 2355990, 9447287190

Fax : 0468-2350801, E-mail : milmapta@gmail.com

TIN No : 32030474207

CST No : 32030474207 C

No. PD/HRD/PROJECT/2017-18 / 576

15.07.2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. Aravind Panicker R, 2<sup>nd</sup> semester Mechanical Engineering student of Mangalam College of Engineering, Kottayam had successfully completed Internship in Pathanamthitta Dairy during the period from 06.07.2017 to 10.07.2017 as part of his academic Curriculum.

We wish all success in his future endeavors.

  
Personnel Officer  
Pathanamthitta Dairy



1

Head Office

: Thiruvananthapuram Regional Co-operative Milk Producer's Union Limited  
Ksheera Bhavan, Pattom, Thiruvananthapuram-695,004  
Ph: 2447109, 2446845, Fax: 0471-2449567

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Kottayam

THIRUVANANTHAPURAM REGIONAL CO-OPERATIVE  
MILK PRODUCER'S UNION LTD.  
PATHANAMTHITTA DAIRY

14-20

(An ISO 22000:2005 Certified Dairy)

Mammoodu Jn., Nariyapuram P.O., Pathanamthitta-689513

Ph: (Office) : 0468 2350089, 2350099, 2355990, 9447287190

TIN No : 32030474207

Fax : 0468-2350801, E-mail : milmapta@gmail.com

CST No : 32030474207 C

No. PD/HRD/PROJECT/2017-18 | 575

15.07.2017

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr.Aravind R, 2<sup>nd</sup> semester  
Mechanical Engineering student of Mangalam College of  
Engineering, Kottayam had successfully completed Internship in  
Pathanamthitta Dairy during the period from 06.07.2017 to  
10.07.2017 as part of his academic Curriculum.

We wish all success in his future endeavors.



Personnel Officer  
Pathanamthitta Dairy



①

Head Office : Thiruvananthapuram Regional Co-operative Milk Producer's Union Limited  
Ksheera Bhavan, Pattom, Thiruvananthapuram-695 004  
Ph: 2447109, 2446845, Fax: 0471-2449567

MANGALAM COLLEGE OF ENGINEERING  
Ettimanoor



NON



# ALUMINIUM INDUSTRIES LIMITED

MANGALAM 689 622. ALAPPUZHA DISTRICT, KERALA, INDIA

7

NO. PO/CE/31


Date: 2<sup>nd</sup> Aug 2016

## CERTIFICATE

This is to certify that Mr. Anil Varghese, 2<sup>nd</sup> Semester B.Tech. Mechanical Engineering Student of Mangalam College of Engineering, Mangalam Campus, Mangalam Hills, Vettimankal P.O., Ettimanoor, Kottayam- 686631 had undergone Internship Programme in our Company from 22<sup>nd</sup> June 2016 to 6<sup>th</sup> July 2016.

We wish him all success in his future assignments.

For THE ALUMINIUM INDUSTRIES LTD

  
Manager HR&IR



CERTIFICATE  
NO. 004464.1



ACCREDITED  
BY RAADVOOR  
ACCREDITATIE  
NETHERLANDS



SWITCHGEAR DIVISION

TEL: +91 2312281, 2312282, 2312283, 2312230, 2312700

FAX: 91 (477) 2312358

E-mail: alindswitchgear@hotmail.com

CABLE: SWITCHGEAR MANGALAM

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettimanoor

1

# ANUGRAHA INDUSTRIES

(Manufactures in all kinds of Aluminium vessels)

TIN-32060657744

Ph: 04868

272464 (Factory)

273258 (Retail)

Mob: 9447267246

SIIED No. 3, MINI INDUSTRIAL ESTATE,  
KATTAPPANA, IDUKKI DT, KERALA-685508.

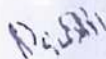
PMT/SSI Reg. No.9/11/05190

Date: 27/07/2018

## CERTIFICATE

Certified that Mr. Ajith Sankar S, a student of fourth Year B.Tech Mechanical Engineering course of Mangalam College of Engineering, Ettumanoor, Kottayam undergone an 'Industrial Training' successfully at Anugraha Industries, Kattappana from 23.07.2018 to 28.07.2018 (6 working days).

During the Training his work and conduct were good.

  
Manager

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

# ANUGRAHA INDUSTRIES

Ph: 04868  
272466 (Factory)  
273258 (Resid)  
Mob: 9447267246

UNIT No. 1 MINI INDUSTRIAL ESTATE,  
KATTAPPANA, EDUKKI DT. KERALA-685508  
PMT/SSI Reg No 9/11/05190

Date 22/07/2018

## CERTIFICATE

Certified that Mr. Asvin Sathyapal, a student of fourth year B Tech Mechanical Engineering course of Mangalam College of Engineering, Ettumanoor, Kottayam undergone an 'Industrial Training' successfully at Anugraha Industries, Kattappana from 23-07-2018 to 28-07-2018 (6 working days).

During the Training his work and conduct were good.

*D. S. S.*  
Manager

*[Signature]*  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
KOTTAYAM

# इंडियन रेअर अर्थ्स लिमिटेड

(भारत सरकार का उपक्रम, परमाणु उर्जा विभाग)  
पथरा - 891 583, कोल्लम जिला, केरल राज्य, भारत

Tel: 91 476 2690701 to 5

Fax: 91 476 2690141

E-mail: cgm-ch@irel.co.in

## INDIAN RARE EARTHS LIMITED

(GOVERNMENT UNDERTAKING, DEPARTMENT OF ATOMIC ENERGY)  
CHAVARA- 691583, KOLLAM DISTRICT, KERALA STATE, INDIA

(AN ISO 9001:2009, ISO 14001 : 2009 AND OHSAS 18001 : 2007 CERTIFIED UNIT)

CH/HRM/TRG/2018

June 05, 2018

### प्रमाण पत्र / CERTIFICATE

This is to certify that Ms.Greeshma S.Krishnan a student of Mangalam College of Engineering, Kottayam has successfully completed her "Internship Training" in our unit towards the partial fulfillment of the requirements for the award of the degree of B Tech (Mechanical) during the period from 24.05.2018 to 05.06.2018.

She has evinced keen interest during her internship training.



उप प्रबंधक(हि)  
DY.MANAGER (H)

निगम कार्यालय-प्लॉट नं 1207, वीर सावरकर मार्ग, सिद्धी विनायक मंदिर के पास, प्रभादेवी, मुंबई-400 028  
Corporate Office : Plot No. 1207, Veer Savarkar Marg, Near Siddhi Vinayak Temple, Prabhadevi, Mumbai - 400 028  
Tel : 01-022 24211630, 24211851, 24220230 Fax: 91-022 24220236  
www.irel.co.in

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Kottayam





# MRV TRADING COMPANY

Kinfra Industrial Park, Kunnammtharam, Thiruvalla, Pin : 689 581 - Kerala  
www.mrvpipes.com, E-mail : mrvpipeskinfra@gmail.com  
Ph : 0469-2690089, 9446548454, 9446538454

Date : .....

20-06-2018

## CERTIFICATE

Certified that Mr. Priyan Pothen Philip (MLM15ME105), B.E(Mechanical) student of Mangalam College of Engineering, Kottayam (Kerala) has successfully completed training in our organization from 4/06/2018 - 18/06/2018.

We appreciate his effort, willingness and enthusiasm with which he has performed his training in our organization.

For MRV Trading Company:

MRV TRADING COMPANY

  
Managing Partner / Partner



  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumbrakeer

CIN: U25209KL2003PTC016224  
TIN: 32050741825  
GST: 32050741825C



Toms Pipes Private Limited

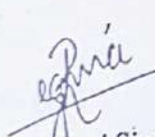
26.05.2018

CERTIFICATE

This is to certify that Mr. Sachin Balu, reg no. MLM15ME112, 3<sup>rd</sup> year B.Tech (Mechanical Engineering) student of Mangalam College of Engineering, Ettumanoor has successfully completed his Industrial Training at our organization during the period from 22.05.2018 to 26.05.2018.

We wish him all the best.

For Toms Pipes Pvt. Ltd.

  
Authorized Signatory



Mfrs. of  PVC Water Pipes  Conduits and  Fittings

Regd. Off: Door No. 6/305, Vattoli, Chethimattom Road, Eravuchira P.O., Thottackad, Kottayam, Kerala - PIN 686 539, INDIA  
Factory: Veroor Industrial Estate, Industrial Nagar P.O., Changanacherry, Kottayam, Kerala - 686 106  
Tel: +91 481 2724414, Fax: 272 4806. Email: tomspipes1@gmail.com, Web: www.tomspipes.com



IN 32080741825C  
C 32080741825  
ST 32080741825C



Toms Pipes Private Limited

DUTY CERTIFICATE 26.05.2018

CERTIFICATE

This is to certify that Mr. Nithin S Kumar, reg no. ML.M15ME098, 3<sup>rd</sup> year B.Tech (Mechanical Engineering) student of Mangalam College of Engineering, Ettumanoor has successfully completed his Industrial Training at our organization during the period from 22.05.2018 to 26.05.2018.

We wish him all the best.

For Toms Pipes Pvt. Ltd.

  
Authorized Signatory



Mfrs. of  PVC Water Pipes  Conduits and  Fittings

Legd. Off: Door No. 6/305, Vattoli, Chethimattom Road, Eravuchira P.O., Thottackad, Kottayam, Kerala - PIN 686 539, INDIA  
Factory: Veroor Industrial Estate, Industrial Nagar P.O., Changanacherry, Kottayam, Kerala - 686 106  
Tel: +91 481 2724414, Fax: 272 4806. Email: tomspipes1@gmail.com, Web: www.tomspipes.com





AMAL JYOTHI  
COLLEGE OF ENGINEERING



'A' Grade

DEPARTMENT OF  
AUTOMOBILE ENGINEERING

☑ HoD: +91 4828 305526  
☑ Dept: +91 4828 305527  
☑ hodauy@amalyjyothi.ac.in  
autoblog@amalyjyothi.ac.in  
[www.amalyjyothi.ac.in](http://www.amalyjyothi.ac.in)

## DUTY CERTIFICATE

This is to certify that Mr. JOHN ROSE JOHN, student of Mechanical Engineering of Mangalam college of engineering Ettumanoor, has completed INTERNSHIP at Royal Enfield Training Centre of M/s Royal Enfield Motors" from 03/01/2018 to 07/01/2018 at Royal Enfield Training centre, , Amal Jyothi College of Engineering, Kanjirappally

Kanjirappally

Date: 07/01/2018



  
HOD

Amal Jyothi College of Engineering, Kanjirappally, Koovappally P.O., Kottayam, Kerala, India. Pin - 686518 ☑ +91 4828 305500, 55

Our Industrial Tie-ups

 BOSCH

 ROYAL ENFIELD

 EICHER

 JK TYRE

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

17<sup>th</sup> August 2016

TO WHOMSOEVER IT MAY CONCERN

I hereby certify that Mr. AKSHAY SURENDRAN, 3<sup>rd</sup> Semester Mechanical Engineering student of MANGALAM COLLEGE OF ENGINEERING, MANGALAM HILLS, P.O. ETTUMANOOR, KOTTAYAM, KERALA-686532, has successfully completed Industrial Training in our Organization from 25<sup>th</sup> July 2016 to 30<sup>th</sup> July 2016. During this period he has trained in Machining shop, Quality, Mold Design and Tool Assembly Departments.

I wish him all his future endeavors.

For Delphi Connection Systems India Pvt Ltd.,

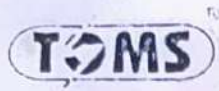
*[Handwritten Signature]*

Manager - HR & Administration



PRINCIPAL  
 MANGALAM COLLEGE OF ENGINEERING  
 Ettumanoor

*[Handwritten Signature]*



15.07.2017

CERTIFICATE

It is hereby certified that Mr. Akshai S Mookkenthottam, Reg No: (MLM15ME015) B.Tech (Mechanical Engineering) student of Mangalam College of Engineering & Technology, Ettumanoor, has successfully completed his Industrial Training at our organization during the period from 11.07.2017 – 15.07.2017.

Wishes all the best.

Toms Pipes Pvt. Ltd.  
*[Signature]*  
Secretary



Mfg. of PVC Water Pipes Conduits and Fittings

Head Office: Changanacherry Road, Erazuchira PO., Thottackad, Kottayam, Kerala - PIN 686 539, INDIA  
Branch Office: Industrial Nagar PO., Changanacherry, Kottayam, Kerala - 686 106  
Phone: 272 4666, Email: tomspipes1@gmail.com, Web: www.tomsplpes.com

*[Signature]*  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



**KERALA STATE ROAD TRANSPORT CORPORATION**

Office of the Works Manager,  
Regional Workshop, Mavelikara - 690 101  
Mappuzha Dist., Phone : 0479 - 230 2409  
e-mail : w.m.r.k.rtdgwan

RIF MI K-1

24-07-2017

**CERTIFICATE**

Certified that **Mr. Adarsh Biju**, a student of 3rd Semester B.Tech Mechanical Engineering Course at Mangalam College of Engineering, Kottayam, Kerala has undergone an **'Industrial Training'** successfully at the Regional Workshop of Kerala State Road Transport Corporation, Mavelikara from 19-07-2017 to 24-07-2017 (5 working days).

During the training his work and conduct were good.



  
WORKS MANAGER



  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING

STATE WATER TRANSPORT DEPARTMENT

DOCK AND REPAIR SECTION,


ALAPPUZHA-688011

CERTIFICATE

This is to certify that Mr:AKASH.V. Third semester B-Tech Mechanical Engineering student in MANGALAM COLLEGE OF ENGINEERING KOTTAYAM has participated in an INTERNSHIP Training in our organization on the following days.

10/07/2017,11/07/2017,12/07/2017,15/07/2017,18/07/2017,20/07/2017(6 days)

His conduct and Character have been ..... *Good* ..... during the above period

  
27.7.2017  
MECHANICAL ENGINEER

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
KOTTAYAM





ആട്ടോകാസ്റ്റ് ലിമിറ്റഡ്  
ഒരു കേരള സർക്കാർ സ്ഥാപനം  
**Autokast Ltd**  
A Government of Kerala Undertaking



CIN-U27310KL1984SGC003975

ANK PURTA

28/07/2018

CERTIFICATE

This is to certify that Mr. Akhil Elias Kurian, B.Tech. Mechanical Engineering student of Mangalam College of Engineering, Ettumanoor has successfully completed "INTERNSHIP" in our company during the period from 23/07/2018 to 28-07-2018 as a part of his curriculum.

He was found to be sincere in his studies.

For AUTOKAST LTD.

*(Handwritten signature)*

DY.MANAGER(HRD&A).



എസ്.എൻ.പുരം പി.ഒ., ചേർത്തല, ആലപ്പുഴ, കേരളം, സൗത്ത് ഇന്ത്യ. പിൻ - 688 582

*(Handwritten signature)*

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

KERALA STATE ROAD TRANSPORT CORPORATION

Office of the Works Manager,  
Regional Workshop, Mavelikara 690 101  
Alappuzha Dist. Phone : 0479 230 2409  
e-mail : [ksrtc@kerala.gov.in](mailto:ksrtc@kerala.gov.in)

24-07-2017

RT MI & I

CERTIFICATE

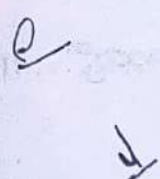
It is certified that Mr. Anandu Balachandran, a student of 3rd Semester Mechanical Engineering Course at Mangalam College of Engineering,

Kottayam, Kerala has undergone an 'Industrial Training' at the Regional Workshop of Kerala State Road Transport Corporation, Mavelikara from 19-07-2017 to 24-07-2017 (5 working days).

During the training his work and conduct were good.



  
WORKS MANAGER



  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

STATE WATER TRANSPORT DEPARTMENT

DOCK AND REPAIR SECTION,

ALAPPUZHA-688011

CERTIFICATE

This is to certify that Ms:BIHADRA DEVI P.J. Third semester B-Tech Mechanical Engineering student in MANGALAM COLLEGE OF ENGINEERING KOTTAYAM has participated in an INTERNSHIP Training in our organization on the following days

10/07/2017.


12/07/2017,15/07/2017,18/07/2017,20/07/2017(5days)

His conduct and Character have been Good..... during the above period

  
MECHANICAL ENGINEER

Alappuzha

07/2017

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Ettumanoor

# KERALA STATE ROAD TRANSPORT CORPORATION


Office of the Works Manager  
Regional Workshop, Alaychikara 690 101  
Alappuzha (Dist), Phone : 0479 230 2409  
www.krsrtc.kerala.gov.in

24-07-2017

## CERTIFICATE

That Mr.Christy V Mathew, a student of 3rd Semester B.Tech  
Engineering Course at Mangalam College of Engineering,  
Kottayam, Kerala has undergone an 'Industrial Training'  
at the Regional Workshop of Kerala State Road Transport  
Alaychikara from 19-07-2017 to 24-07-2017 (5working days).  
His training his work and conduct were good.



  
WORKS MANAGER

①

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



ആട്ടോകാസ്റ്റ് ലിമിറ്റഡ്  
 ഒരു കേരള സർക്കാർ സ്ഥാപനം  
**Autokast Ltd**  
 A Government of Kerala Undertaking



CIN-U27310KL1984SGC003975

28/07/2018

CERTIFICATE

I hereby certify that Mr. Fredy Antony, B.Tech. Mechanical Engineering student of Mangalam College of Engineering, Ettumanoor has successfully completed "INTERNSHIP" in our company during the period from 23/07/2018 to 28/07/2018 in his curriculum.

He is found to be sincere in his studies.

AUTOKAST LTD,



(MGR/HRD&A).

കെ.എ.എസ്.പി.ഒ., ചേർത്തല, ആലപ്പുഴ, കേരളം, സൗത്ത് ഇന്ത്യ, പിൻ - 688 582  
 S.N. Puram P.O. Cherthala, Alappuzha (Dist.), Kerala, South India Pin - 688 582  
 Phone : 0478-2864961 to 64, 2864892. Fax : 0478-2862497  
 E-mail : autokast@the.edu@gmail.com, autokast@bsnl.in Website : www.autokast.com

*Handwritten signature*

PRINCIPAL  
 MANGALAM COLLEGE OF ENGINEERING  
 Ettumanoor

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM**



**CERTIFICATE**

This is to certify that the report entitled "LIFE SAVER USING RASPBERRY PI" submitted by **AKSHAYA V MADHU (MLM15CS005)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

*Neena G Krishnan*  
6/10/19

Ms. Neena G Krishnan  
Assistant Professor  
Dept. of Computer Science

*External Supervisor*  
External Supervisor

*UG Coordinator*  
UG Coordinator

Ms. Syamamol T  
Assistant Professor  
Dept. of Computer Science

*Head of the Department*  
Head of the Department

Dr. Vinodh P Vijayan  
Associate Professor & HOD  
Dept. of Computer Science

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

*Signature*

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM**



**CERTIFICATE**

This is to certify that the report entitled "LIFE SAVER USING RASPBERRY PI" submitted by ANJU MOL JOHN (MLM15CS016) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms. Neena G Krishnan  
Assistant Professor  
Dept. of Computer Science

**External Supervisor**

**UG Coordinator**

Ms. Syamamol T  
Assistant Professor  
Dept. of Computer Science

**Head of the Department**

Dr. Vinodh P Vijayan  
Associate Professor & HOD  
Dept. of Computer Science

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MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM**



**CERTIFICATE**

This is to certify that the report entitled "LIFE SAVER USING RASPBERRY PI" submitted by **ASWATHY B NAIR (MLM15CS027)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms. Neena.G.Krishnan  
Assistant Professor  
Dept. of Computer Science

Ms. Syamamol T  
Assistant Professor  
Dept. of Computer Science

External Supervisor

Dr. Vinodh P Vijayan  
Associate Professor & HOD  
Dept. of Computer Science

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MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM



CERTIFICATE

This is to certify that the report entitled "LIFE SAVER USING RASPBERRY PI" submitted by ASWATHY JAYAKUMAR(MLM15CS026) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Internal Supervisor

Ms. Neena G Krishnan  
Assistant Professor  
Dept. of Computer Science

UG Coordinator

Ms. Syamamol T  
Assistant Professor  
Dept. of Computer Science

External Supervisor

Head of the Department

Dr. Vinodh P Vijayan  
Associate Professor & HOD  
Dept. of Computer Science

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ETTUMANOOR

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM




**CERTIFICATE**

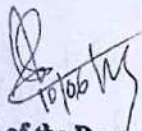
This is to certify that the report entitled "Phishing detection using wrapper feature selection and google classification" submitted by Devika Raju (MLM15CS039) to the APJ Abdul Kalam Technological University in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by them her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
Internal Supervisor

Ms Jissy Liz Jose  
Assistant Professor  
Dept. of Computer Science

  
External Supervisor

  
UG Coordinator  
Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
Head of the Dept  
Dr. Vinodh P Vijayan  
Associate Professor and HOD  
Dept. of Computer Science

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MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR




**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM**




**CERTIFICATE**


This is to certify that the report entitled "Phishing detection using wrapper feature selection and google classification" submitted by Karthika S (MLM15CS055) to the APJ Abdul Kalam Technological University in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by them her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

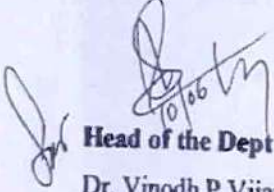
  
Internal Supervisor

Ms Jissy Liz Jose  
Assistant Professor  
Dept. of Computer Science

  
UG Coordinator

Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
External Supervisor

  
Head of the Dept

Dr. Vinodh P Vijayan  
Associate Professor and HOD  
Dept. of Computer Science


PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the report entitled "IMAGE QUALITY ENHANCEMENT SYSTEM FOR COMPUTER VISION APPLICATION (SNAP-PIC)", submitted by ALAN ABRAHAM (MLM15CS006) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

  
**Internal Supervisor**

Ms. Sreenimol K.R

Associate Professor

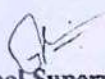
Dept. of Computer Science

  
**UG Coordinator**

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

  
**External Supervisor**

  
**Head of the Dept.**

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science



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MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



CERTIFICATE

This is to certify that the report entitled "IMAGE QUALITY ENHANCEMENT SYSTEM FOR COMPUTER VISION APPLICATION (SNAP-PIC)", submitted by BONY BABY (MLM15CS036) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

Internal Supervisor

Ms. Sreenimol K.R

Associate Professor

Dept. of Computer Science

UG Coordinator

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

External Supervisor

Head of the Dept.

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science

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Ettumanoor

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR



विश्वं शास्त्रे प्रतिष्ठितम्।

CERTIFICATE

This is to certify that the report entitled "A SMART MEDIKIT USING IoT TECHNOLOGY" submitted by ARUN GEORGE to APJ Abdul Kalam Technological University in partial fulfilment of the requirements for the award of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

*Gayathri R Krishna*  
27/5/19

Internal Supervisor  
Ms. GAYATHRI R KRISHNA  
Assistant Professor  
Department of CSE  
MLMCE

*Arjun George*

External Supervisor

*Syama Mol T*

UG Coordinator  
Ms. SYAMA MOL T  
Assistant Professor  
Department of CSE  
MLMCE

*Vinodh P Vijayan*

Head of Department  
Dr. VINODH P VIJAYAN  
Associate Professor  
Department of CSE  
MLMCE

*Arjun George*

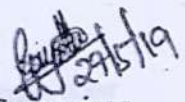
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

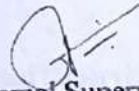
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR**

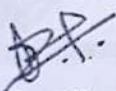



**CERTIFICATE**

This is to certify that the report entitled "A SMART MEDIKIT USING IoT TECHNOLOGY" submitted by GEO JOY to APJ Abdul Kalam Technological University in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
Internal Supervisor  
Ms. GAYATHRI R KRISHNA  
Assistant Professor  
Department of CSE  
MLMCE

  
External Supervisor

  
UG Coordinator  
Ms. SYAMA MOL T  
Assistant Professor  
Department of CSE  
MLMCE

  
Head of Department  
Dr. VINODH P VIJAYAN  
Associate Professor  
Department of CSE  
MLMCE

  
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MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the report entitled **“Iot Based Public Water Complaint Management System”**, submitted by **Britto Thomas (MLM15CS037)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms. Nimmymol Manuel

Assistant Professor

Dept. of Computer Science

**UG Coordinator**

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

**External Supervisor**

**Head of the Dept.**

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



**MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

This is to certify that the report entitled "**IoT Based Public Water Complaint Management System**", submitted by **Akshay Suresh (KVE15CS009)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms. Nimmyamol Manuel

Assistant Professor

Dept. of Computer Science

**UG Coordinator**

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

**External Supervisor**

**Head of the Dept.**

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science


**PRINCIPAL**  
**MANGALAM COLLEGE OF ENGINEERING**  
Ettumanoor

**MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**



**CERTIFICATE**

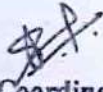
This is to certify that the report entitled "Iot Based Public Water Complaint Management System", submitted by Nashim K N (KVE15CS036) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

  
**Internal Supervisor**

Ms. Nimmymol Manuel

Assistant Professor

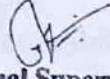
Dept. of Computer Science

  
**UG Coordinator**

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

  
**External Supervisor**

  
**Head of the Dept.**

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM**



**CERTIFICATE**

This is to certify that the report entitled "ATTRIBUTE BASED PRIVACY PROTECTION ON CLOUD COMPUTING" submitted by APARNA DINESH (MLM15CS020), to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by them under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Internal Supervisor

Ms. Simy Mary Kurian

Assistant Professor

Dept. of Computer Science

UG Coordinator

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

External Supervisor

HEAD OF THE DEPARTMENT

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science

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Ettumanoor

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR  
KOTTAYAM



CERTIFICATE

This is to certify that the report entitled "ATTRIBUTE BASED PRIVACY PROTECTION ON CLOUD COMPUTING" submitted by MARIAMMA THOMAS (MLM15CS061), to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by them under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

Internal Supervisor

Ms. Simy Mary Kurian

Assistant Professor

Dept. of Computer Science

UG Coordinator

Ms. Syamamol T

Assistant Professor

Dept. of Computer Science

External Supervisor

HEAD OF THE DEPARTMENT

Dr. Vinodh P Vijayan

Associate Professor & HOD

Dept. of Computer Science

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MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR

MAY 2019

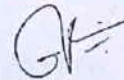


**CERTIFICATE**

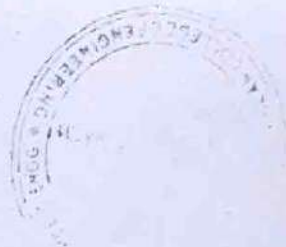
*This is to certify that the report entitled "Next Loc - An Approach for mobile users future location prediction", submitted by Abhinath S (MLM15CS001) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.*

  
10/6/19

**Internal Supervisor**  
Ms Syamala S  
Assistant Professor  
Dept. of CSE, MLMCE



**External Supervisor**



**UG Coordinator**  
Ms. Syamamol T  
Assistant Professor  
Dept. of CSE, MLMCE

**Head of the Department**  
Dr. Vinodh P Vijayan  
Professor  
Dept. of CSE, MLMCE



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MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR**

**MAY 2019**



**CERTIFICATE**

*This is to certify that the report entitled "Next Loc - An Approach for mobile users future location prediction", submitted by Avinash Rajan (MLM15CS032) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.*

**Internal Supervisor**  
Ms Syamala S  
Assistant Professor  
Dept. of CSE, MLMCE

**External Supervisor**

**UG Coordinator**  
Ms. Syamamol T  
Assistant Professor  
Dept. of CSE, MLMCE

**Head of the Department**  
Dr. Vinodh P Vijayan  
Professor  
Dept. of CSE, MLMCE

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MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR**

MAY 2019



**CERTIFICATE**

*This is to certify that the report entitled "Next Loc - An Approach for mobile users future location prediction", submitted by Joji Sebastian (MLM15CS053) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.*

  
10/6/19

**Internal Supervisor**  
Ms Syamala S  
Assistant Professor  
Dept. of CSE, MLMCE



**External Supervisor**

**UG Coordinator**  
Ms. Syamamol T.  
Assistant Professor  
Dept. of CSE, MLMCE



**Head of the Department**  
Dr. Vinodh P Vijayan  
Professor  
Dept. of CSE, MLMCE




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MANGALAM COLLEGE OF ENGINEERING, EUTTUMANOOR  
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**CERTIFICATE**


This is to certify that the report entitled "SoilDoc: Soil pH and crop determinator", submitted by **Maneesha G Nair (KVE15CS032)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

  
**Internal Supervisor**

Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
**External Supervisor**

  
**Head of the Dept**  
Dr. Vinodh P Vijayan  
Associate Professor and HOD  
Dept. of Computer Science

  
**UG Coordinator**

Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

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KOTTAYAM**



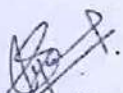
**CERTIFICATE**

This is to certify that the report entitled "SoilDoc: Soil pH and crop determinator", submitted by Neethu Prathapan (LTCE15CS007) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.


  
**Internal Supervisor**

Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
**External Supervisor**

  
**UG Coordinator**  
Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science



  
**Head of the Dept**  
Dr. Vinodh P Vijayan  
Associate Professor and HOD  
Dept. of Computer Science

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KOTTAYAM**




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**CERTIFICATE**

This is to certify that the report entitled "SoilDoc: Soil pH and crop determinator", submitted by Sethulakshmi R (LTCE15CS007) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by her under my guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.


  
**Internal Supervisor**

Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
**External Supervisor**

  
**UG Coordinator**

Ms Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
**HEAD OF THE DEPT**  
Dr. Vinodh P Vijayan  
Associate Professor and HOD  
Dept. of Computer Science



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**CERTIFICATE**

This is to certify that the report entitled "AN INTELLIGENT GAS LEAKAGE DETECTOR WITH SMART ALERT AND PREDICTION USING IoT", submitted by Ashiga Suresh (MLM15CS024), to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms Jinu P Sainudeen

Assistant Professor

Dept. of Computer Science

**External Supervisor**

**UG Coordinator**

Ms Syamamol T

Assistant Professor

Dept. of Computer Science

**Head of Department**

Dr. Vinodh P Vijayan

Associate Professor and HOD

Dept. of Computer Science

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MANGALAM COLLEGE OF ENGINEERING, EUTTUMANOOR  
KOTTAYAM**



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**CERTIFICATE**

This is to certify that the report entitled "AN INTELLIGENT GAS LEAKAGE DETECTOR WITH SMART ALERT AND PREDICTION USING IoT", submitted by Devika Vijay (MLM15CS040), to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer Science and Engineering is a bonafide record of the project work carried out by him/her under my/our guidance and supervision.. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms Jinu P Sainudeen

Assistant Professor

Dept. of Computer Science

**External Supervisor**

**UG Coordinator**

Ms Syamamol T

Assistant Professor

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**Head of Department**

Dr. Vinodh P Vijayan

Associate Professor and HOD

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**CERTIFICATE**

This is to certify that the report entitled "GRAY-HOLE ATTACK MINIMIZATION FOR AD-HOC NETWORKS USING CONTRADICTION" submitted by **ATHIRA HARIKRISHNAN(MLM15CS030)** to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

**Internal Supervisor**

Ms. Tinu Thomas  
Assistant Professor  
Dept. of Computer Science

**External Supervisor**

**UG Coordinator**

Ms. Syamamol T  
Assistant Professor  
Dept. of Computer Science

**Head of the Department**

Dr. Vinodh P Vijayan  
Associate Professor & HOD  
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
This is to certify that the report entitled "GRAY-HOLE ATTACK MINIMIZATION FOR AD-HOC NETWORKS USING CONTRADICTION" submitted by FATHIMA MANZOOR (MLM15CS042) to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in Computer science and Engineering is a bonafide record of the project work carried out by her under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose.

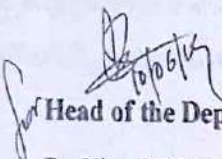
Internal Supervisor

  
Ms. Tinu Thomas  
Assistant Professor  
Dept. of Computer Science

  
External Supervisor

UG Coordinator

  
Ms. Syamamol T  
Assistant Professor  
Dept. of Computer Science

  
Head of the Department  
Dr. Vinodh P Vijayan  
Associate Professor & HOD  
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MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.



CERTIFICATE

*This is to certify that the report entitled "COMPARITIVE DYNAMIC ANALYSIS OF RCC & COMPOSITE BUILDING FRAME" is the authentic record of the project performed by NEETHU S, S SIVAJOTHI, SIEFEEK T T and SURAJ RAJMOHAN NAIR in partial fulfilment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

Alice Johny.

Assistant Professor

(Guide)

Bennet Kuriakose

Associate Professor.

(Project Coordinator)

PRINCIPAL  
COLLEGE OF ENGINEERING  
MANGALAM  
Ettumanoor

Reshma Kassim.

Associate Professor.

(Head of the Department)

DEPARTMENT OF CIVIL ENGINEERING


MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.





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**CERTIFICATE**

*This is to certify that the report entitled "SLOPE STABILITY ANALYSIS USING PLAXIS 2D SOFTWARE" is the authentic record of the seminar performed by AKHINK MATHEW, ANANTHU ANIL, ASWINI KUMAR ANIL KUMAR, JERRIN THOMAS, in partial fulfilment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

  
**Vibin Varghese**  
Assistant Professor.  
(Guide)

  
**Salini Theres Kurian**  
Assistant Professor.  
(Project co-ordinator)

  
**Reshma Kassim,**  
Associate Professor.  
(Head of the Department)

  
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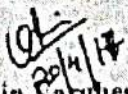


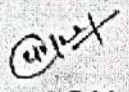
DEPARTMENT OF CIVIL ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.




**CERTIFICATE**

*This is to certify that the report entitled "ANALYSIS OF GEOTEXTILE REINFORCED ROAD EMBANKMENT USING PLAXIS 2D" is the authentic record of the project performed by ANJALA P ANTONY, JIBIN JOSE, JUVIN RAVI GEORGE and JYOTHIS ANNA MATHEWS in partial fulfilment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

  
Vilbin Varghese  
Asst. professor  
(Guide)

  
Manoj C M  
Asst. professor  
(Project Coordinator)

  
Reshma Kussim,  
Associate Professor  
(Head of the Department)

  
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Ettumanoor

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MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.



**CERTIFICATE**

*This is to certify that the report entitled "NUMERICAL STUDY OF REINFORCED CONCRETE BEAMS RETROFITTED WITH FIBRE REINFORCED POLYMER" is the authentic record of the project performed by ASWATHY BABU, JEENA JOSHUA, JERIN P MATHEW and JESIN VARGHESE CHACKO in partial fulfillment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

Aswathy Soman,  
Assistant Professor  
(Guide)

Manoj C M PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor  
Assistant Professor  
(Project Coordinator)

Reshma Kassim,  
Associate Professor.  
(Head of the Department)

DEPARTMENT OF CIVIL ENGINEERING  
MAGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.



CERTIFICATE

*This is to certify that the report entitled "DESIGN OF WATER SUPPLY DISTRIBUTION NETWORK FOR NEENDOOR PANCHAYATH USING EPANET" is the authentic record of the bonufide project work done by AMMU C S(13007956), ARSILA T MANI (Reg.No.13007967), ASWANI R (13007976), JEAN MARY JACOB(13007991) submitted in partial fulfilment of the requirements for the award of the DEGREE OF BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mangalam College of Engineering, Ettumanoor, Kottayam, during the academic year 2013-2017*

SUSAN MATHEW

Asst. Professor

(Internal Guide)

MANOJ C.M

Asst. Professor

(Project co-ordinator)

RESHIMA KASIM

Associate Professor.

(Head of the Department)

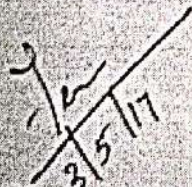
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MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.

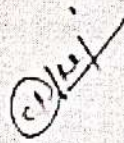


CERTIFICATE

*This is to certify that the report entitled "ELECTRO COAGULATION IN WASTEWATER TREATMENT" is the authentic record of the project performed by MS AMALA BABY, MR ASHIK MOHAMMED NAZEER, MR JAYADEVS, MS JOSNA P JOSE in partial fulfilment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

  
3/5/17

Ms. Femi Jose  
Assistant Professor  
(Internal guide)



Mr. Manoj C.M  
Assistant Professor  
(Project co-ordinator)



Ms. Reshma Kassim  
Associate Professor  
(Head of the Department)




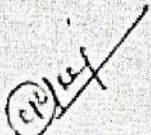
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MANGALAM COLLEGE OF ENGINEERING

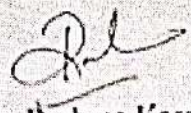



CERTIFICATE

*This is to certify that the report entitled "COMPRESSIVE STRENGTH AND DURABILITY ON FaL-G MORTAR BLOCK" is the authentic record of the project performed by AMAL JOMY, ANJALY S, ASHISH AUGUSTINE, GOPIKA V P in partial fulfillment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The content of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

  
Mrs. Sipli Abraham  
Assistant Professor  
(Guide)

  
Mr. Manoj  
Assistant Professor  
(Project Coordinator)

  
Mrs. Reshma Kassim  
Associate Professor  
(Head of the Department)

  
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Ettumanoor

DEPARTMENT OF CIVIL ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.



**CERTIFICATE**

*This is to certify that the report entitled "WATER SUPPLY SCHEME FOR ATHIRAMPUZHA PANCHAYAT" is the authentic record of the project done by NISHKAMA SUDARSANAN, SIVAPRIYA K S, CIBIN JOSE and VISHNU DEV D in partial fulfilment of the requirements for the award of BACHELOR OF TECHNOLOGY IN CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

Reshmi A S,  
Assistant Professor  
(Internal Guide)

Fr. Bennet Kurlakose,  
Associate professor  
(Project Coordinator)

Reshima Kassim,  
Associate Professor  
(Head of the Department)


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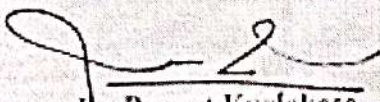
DEPARTMENT OF CIVIL ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.

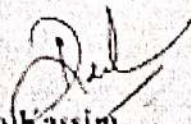


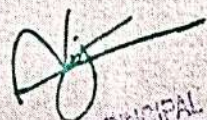
CERTIFICATE

*This is to certify that the report entitled "GEOSPATIAL MODELLING OF GROUND WATER QUALITY OF PATHANAMTHITTA DIST., KERALA" is the authentic record of the project performed by RINO JOE SUNNY, SHIBIN.K.BABU, SRUTHY JAYAPRAKASH and VANI MOHAN in partial fulfilment of the requirements for the award of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

  
Vilbin Varghese,  
Assistant Professor.  
(Gulde)

  
Fr. Bennet Kurlakose,  
Associate Professor.  
(Project Coordinator)

  
Reshma Kassim,  
Associate Professor.  
(Head of the Department)

  
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DEPARTMENT OF CIVIL ENGINEERING  
MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR.



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**CERTIFICATE**

*This is to certify that the project report entitled "INVESTIGATION OF FAILURE OF ROADS IN KUTTANADU REGION" is the authentic record of the project presented by RINU ANTONY, ROSHINI N.R, SACHIN KOSHY MATHEW, SANOOP A.S for the partial fulfilment of the requirements for the award of the degree of BACHELOR OF TECHNOLOGY in CIVIL ENGINEERING of Mahatma Gandhi University, Kottayam. The contents of the report, in full or in parts, have not been submitted to any other University for the award of any degree.*

Feba S Thomas  
Assistant Professor.  
(Guide)

Fr. Bennet Kuriakose  
Associate Professor.  
(Project Coordinator)

Roshma kassim  
Associate Professor.  
(Head of the Department)

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mob: +91 9895 011927  
mail to: info@thinkforce.in  
web: www.thinkforce.in

Date: 25/06/2017  
Place: Ernakulam

### CERTIFICATE

This is to certify that ANJANA BABU, B.Tech student of MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR has successfully completed 5 days internship program, from 21/06/2017 to 25/06/2017 at THiNK FORCE SOFTWARE SOLUTIONS, Ernakulam as part of their curriculum.

Internships

*Kripa Krishnan*  
Kripa Krishnan  
Manager Operations



MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Date: 1<sup>st</sup> August 2018

To: Whomever it may concern

Sub: Internship Completion Certificate for Mr. JAIMON THOMAS

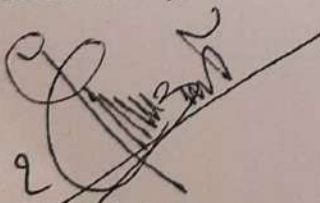
This is an Internship Completion certificate for Mr. Jaimon Thomas, 5<sup>th</sup> Semester Student of Bachelor of Technology ( Computer Science & Engineering ) at Mangalam College of Engineering , Ettumanoor, Kerala.

We state on record that Mr. Jaimon Thomas has successfully completed an internship program in the role of **Software Engineer Intern** at Litmus7 Systems Consulting Pvt Ltd, Smart City, Kochi, Kerala from 23<sup>rd</sup> July 2018 to 1<sup>st</sup> August 2018 and location of this internship was at our corporate office at #208,#209 SCK01, Smartcity, Kakkanad, Kochi, Kerala- 682042.

During this period, Jaimon worked on familiarizing with various Enterprise level software development process in Java/ JEE / mobile /POS based applications and Networking/Security. He has successfully met the objectives that were set at the beginning of the internship. Jaimon shows a lot of promise and skill in his learning attitude and commitment for assignments.

We wish him all the best in all his future endeavours.

Thanking you,  
Yours sincerely,



**James K Varkey**  
Chief Enterprise Architect & Program Director,  
[james@litmus7.com](mailto:james@litmus7.com)  
Ph: +91-904-888-9717





Expertzlab Technologies Pvt. Ltd.

CIN: U72900KL2016PTC046479

Date:

Ref. No 19/11/590

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Miss. Arya Mol K S, B. tech Computer Science 4<sup>th</sup> Year Student of Mangalam College Of Engineering ,Ettumanoor has successfully completed 5 days internship program on Python with Expertzlab technologies Pvt Ltd.

Start Date - 12<sup>th</sup> July 2019

End Date - 16<sup>th</sup> July 2019

We wish her all the best for future endeavors

Date: 16/07/2019

Palarivattom

For Expertzlab Technologies

MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor





# ICT ACADEMY OF KERALA

## Certificate of Internship

Certified that Mr./Ms. *Joel A. Abraham*.....*shekukulath*..... has participated in the 5-day Internship Programme conducted by ICT Academy of Kerala from *03/07/2017*..... to *07/07/2017*..... at its Learning Centre.



Shri. Santhosh Kurup  
CEO, ICT Academy of Kerala



off +91 484 4055830  
mob +91 9895 011927  
mail info@thinkforce.in  
web www.thinkforce.in

Date: 24 June 2017  
Place: Ernakulam

### CERTIFICATE

This is to certify that **GARGY PONNACHAN, B.Tech** student of **MANGALAM COLLEGE OF ENGINEERING , ETTUMANOOR** has successfully completed 5 days internship program in Android, from 20/06/2017 to 24/06/2017 at **THINK FORCE SOFTWARE SOLUTIONS, Ernakulam** as part of their curriculum.

*Kripa Krishnan*

Kripa Krishnan  
Manager Operations



*[Handwritten Signature]*



off: +91 484 4055830  
mob: +91 9895 031927  
mail to: info@thinkforce.in  
web: www.thinkforce.in

Date: 25/06/2017  
Place: Ernakulam

## CERTIFICATE

This is to certify that AMRUTHA SURENDRAN, B.Tech student of MANGALAM COLLEGE OF ENGINEERING , ETTUMANOOR has successfully completed 5 days internship program, from 21/06/2017 to 25/06/2017 at THINK FORCE SOFTWARE SOLUTIONS, Ernakulam as part of their curriculum.

*Kripa Krishnan*  
Kripa Krishnan  
Manager Operations



Date: 24 June 2017  
Place: Ernakulam

**CERTIFICATE**

This is to certify that **BISMI NAZAR**, B.Tech student of **MANGALAM COLLEGE OF ENGINEERING , ETTUMANOOR** has successfully completed 5 days internship program in Android, from 20/06/2017 to 24/06/2017 at **THINK FORCE SOFTWARE SOLUTIONS**, Ernakulam as part of their curriculum.

*Kripa Krishnan*  
**Kripa Krishnan**  
Manager Operations



*[Handwritten signature]*



call +91 484 4055830  
mobile +91 9895 031927  
mail to info@thinkforce.in  
web www.thinkforce.in

Date: 25/06/2017  
Place: Ernakulam

### CERTIFICATE

This is to certify that CLARA C J, B.Tech student of MANGALAM COLLEGE OF ENGINEERING , ETTUMANOOR has successfully completed 5 days internship program, from 21/06/2017 to 25/06/2017 at THINK FORCE SOFTWARE SOLUTIONS, Ernakulam as part of their curriculum.

*Kripa Krishnan*  
Kripa Krishnan  
Manager Operations







off: +91 484 4055830  
mob: +91 9895 031927  
mail to: info@thinkforce.in  
web: www.thinkforce.in

Date: 24 June 2017  
Place: Ernakulam

### CERTIFICATE

This is to certify that **DRISYA MERIN SAJI**, B.Tech student of **MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR** has successfully completed 5 days internship program in Android, from 20/06/2017 to 24/06/2017 at **THINK FORCE SOFTWARE SOLUTIONS, Ernakulam** as part of their curriculum.

*Kripa Krishnan*  
Kripa Krishnan  
Manager Operations



*[Signature]*  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



**TRIO IT SERVICES**

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JULY 7, 2017

TO WHOM IT MAY CONCERN

CERTIFICATE OF COMPLETION

This is to certify that Mr. Benjamin Jacob a student of MANGALAM COLLEGE OF ENGINEERING has undergone his Internship with Trio IT Services Pvt Ltd, Bangalore from July 3, 2017 to July 7, 2017.

During the internship he worked on different modules of company projects and demonstrated good skills in the frame work of IT Operations services and IT Automation. This involves CISCO Networks Monitoring, Application and Server Monitoring, Monitoring Tools like Nagios, Manage Engine and Sales Force.

Wishing him the very best for his future

Thanking you

For Trio IT Services P Ltd

Michael Martin  
Director



S2 Bailey, Rhenius Street,  
Richmond Town, Bangalore  
560025, Karnataka, India

contactus@trioitservices.in

THNK


Date: 25/06/2017  
Place: Ernakulam

CERTIFICATE

This is to certify that ARYA RAJAGOPAL, B.Tech student of MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR has successfully completed 5 days internship program, from 21/06/2017 to 25/06/2017 at THINK FORCE SOFTWARE SOLUTIONS, Ernakulam as part of their curriculum.

Kripa Krishnan  
Manager Operations



  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Ref. No.: ATPL#00452/0617

# Aabasoft®

14<sup>th</sup> June 2017

## INTERNSHIP CERTIFICATE

This is to certify that Mr. ADARSH VENKATESH (B-Tech CS & Eng., Caarmel Engineering College) has completed 5 days Internship in Android from this organization.

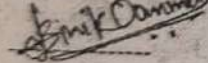
Topics covered:

- Java Basics
- Introduction to Android
- Android Layout Design
- Giving actions to Widgets
- Application for Registration

During his tenure with us we found him sincere and hardworking. We wish him all the best for future endeavor.

Examined by,

Android Trainer



Sini K Oommen

Verified by,

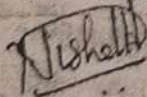
Head of the Department:



Harunshah Salim

Certified by,

For Aabasoft Technologies India Pvt. Ltd.



Nisha Roy

Head - HR & Administration

Aabasoft | Infopark | Kochi | India

www.aabasoft.com



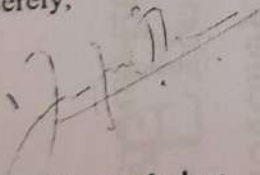
Date: June 27, 2017

MCPL/HR/2016-17/057

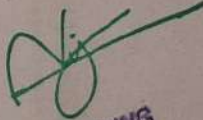
**CERTIFICATE OF EXPERIENCE**

This is to certify that Ms. Aryamol K S has done internship at Mobtecnica Consultancy Pvt. Ltd. from 19<sup>th</sup> June, 2017 to 22<sup>nd</sup> June, 2017 on **Java Development**. She worked sincerely on her assignments and her performance was found satisfactory. We wish her all the best for her future endeavour.

Yours Sincerely,

  
Saifudheen A Kayamkulam,  
Chief Executive Officer



  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

# CERTIFICATE *of* INTERNSHIP

We present this certificate to

**Abhirami Ravikumar**


In appreciation for successfully completing Internship on Oracle Database,  
Networking, Redhat, PHP, CEH, Python and Java at

**Technovalley Software India Pvt. Ltd.**

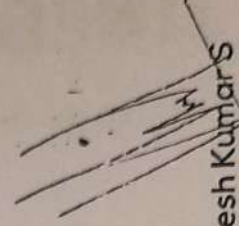
Conducted between

**9<sup>th</sup> July 2018 to 25<sup>th</sup> July 2018**



  
**Jibu John**

Head - Training Services, AES

  
**Rajesh Kumar S**  
Chief Executive Officer




# CERTIFICATE *of* INTERNSHIP

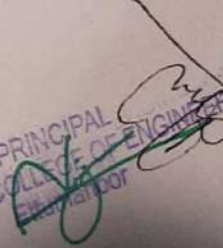
We present this certificate to  
**Ann Mary Joppa**

In appreciation for successfully completing Internship on Oracle Database,  
Networking, Redhat, PHP, CEH, Python and Java at  
**Technovalley Software India Pvt. Ltd.**

Conducted between  
9<sup>th</sup> July 2018 to 25<sup>th</sup> July 2018



  
Rajesh Kumar S

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
PILANMADUR  
Jibu John

# CERTIFICATE

OF INTERNSHIP

Certificate No: SDC073/IN/0718

THIS CERTIFICATE IS PROUDLY PRESENTED TO

*Abraham John*

has Successfully Completed Internship in Editorial Backing  
in Stepz Development Centre, Kottayam

The Internship was conducted from 09/07/2018 to 13/07/2018



*Shirley*

Shirley Kuruvilla

CEO



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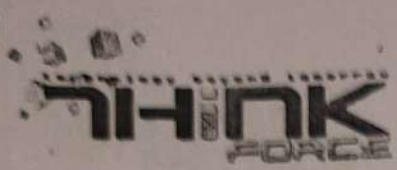
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**ESSI**  
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off: +91 484 4055830  
mob: +91 9895 031927  
mail to: info@thinkforce.in  
web: www.thinkforce.in

Date: 24 June 2017  
Place: Ernakulam

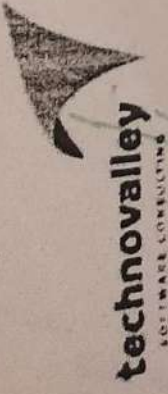
### CERTIFICATE

This is to certify that **AMRUTHA V SHENOY**, B.Tech student of **MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR** has successfully completed 5 days internship program in Android, from 20/06/2017 to 24/06/2017 at **THINK FORCE SOFTWARE SOLUTIONS, Ernakulam** as part of their curriculum.

*Kripa Krishnan*  
Kripa Krishnan  
Manager Operatons



MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



# CERTIFICATE

*of*

## INTERNSHIP

We present this certificate to

**Aksa Marian George**

In appreciation for successfully completing Internship on Oracle Database, Networking, Redhat, PHP, CEH, Python and Java at

**Technovalley Software India Pvt. Ltd.**

Conducted between

**9<sup>th</sup> July 2018 to 25<sup>th</sup> July 2018**



**Jibu John**

Head - Training Services, AES

**Rajesh Kumar S**  
Chief Executive Officer

Date: 24 June 2017  
Place: Ernakulam

**CERTIFICATE**

This is to certify that ALPHA GIGI, B.Tech student of MANGALAM COLLEGE OF ENGINEERING ,ETTUMANOOR has successfully completed 5 days internship program in Android, from 20/06/2017 to 24/06/2017 at THINK FORCE SOFTWARE SOLUTIONS, Ernakulam as part of their curriculum.

*Kripa Krishnan*

Kripa Krishnan  
Manager Operations



*[Signature]*

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**CERTIFICATE**  
OF INTERNSHIP  
Certificate No: SDC118/IN/0718

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

*Akshay Venugopal*

has Successfully Completed Internship in Embedded System  
in Stepz Development Centre, Kottayam  
The Internship was conducted from 23/07/2018 to 27/07/2018



*Shalby Kuruvilla*  
CENTRE HEAD





off: +91 484 4055810  
mob: +91 9895 011927  
mail to: info@thinkforce.in  
web: www.thinkforce.in

Date: 25/06/2017  
Place: Ernakulam

### CERTIFICATE

This is to certify that ANJALI K REJIVE, B.Tech student of MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR has successfully completed 5 days internship program, from 21/06/2017 to 25/06/2017 at THINK FORCE SOFTWARE SOLUTIONS, Ernakulam as part of their curriculum.

*Kripa Krishnan*

Kripa Krishnan  
Manager Operations



MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

# CERTIFICATE

OF INTERNSHIP

Certificate No: SDC120/IN/0718

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

*Albin Shaji*

has Successfully Completed Internship in Embedded System  
in Stepz Development Centre, Kottayam  
The Internship was conducted from 23/07/2018 to 27/07/2018



*Shailby Kuravilla*

Shailby Kuravilla  
CENTRE HEAD



# CERTIFICATE

OF INTERNSHIP

Certificate No: SDC070/IN/0718

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

*Akshayman K V*

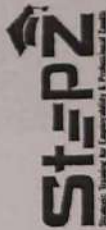
has Successfully Completed Internship in Ethical Hacking  
in Stepz Development Centre, Kottayam

The Internship was conducted from 09/07/2018 to 13/07/2018



*Shaijy*

Shaijy Kuruvilla  
CENTRE HEAD



*[Signature]*

PRINCIPAL  
ANGELAM COLLEGE OF ENGINEERING  
Ettimanoor



# CERTIFICATE *of* INTERNSHIP

We present this certificate to

**Annu Saji**

In appreciation for successfully completing Internship on Oracle Database, Networking, Redhat, PHP, CEH, Python and Java at  
**Technovalley Software India Pvt. Ltd.**

Conducted between

**9<sup>th</sup> July 2018 to 25<sup>th</sup> July 2018**



Jibu John

Head - Training Services, AES

Rajesh Kumar S  
Chief Executive Officer





# CERTIFICATE *of* INTERNSHIP

We present this certificate to

**Akhila S**

In appreciation for successfully completing Internship on Oracle Database,  
Networking, Redhat, PHP, CEH, Python and Java at  
**Technovalley Software India Pvt. Ltd.**

Conducted between

**9<sup>th</sup> July 2018 to 25<sup>th</sup> July 2018**



Jibu John

Head - Training Services, AES

  
Rajesh Kumar S  
Chief Executive Officer  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

# CERTIFICATE

OF INTERNSHIP

Certificate No: SDC119/IN/0718

THIS CERTIFICATE IS PROUDLY PRESENTED TO

*Febin Joe Kurian*

has Successfully Completed Internship in Embedded System  
in Stepz Development Centre, Kottayam  
The Internship was conducted from 23/07/2018 to 27/07/2018



*Shaijby Kuruvilla*

Centre Head

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(Established by the Govt. of Kerala)

**REGIONAL CENTRE, PRODUCTION AND MAINTENANCE DIVISION ERNAKULAM**  
(Udyog Aadhaar No.KL02A0010945)


### CERTIFICATE OF INTERNSHIP

This is to certify that Ms.Jossy P.Xavier student of B.Tech, Computer Science and Engineering, Mangalam College of Engineering Ettumanoor,Kottayam successfully completed internship on Internet of Things at Production and Maintenance Division, Regional Centre, Edappally, Kochi from 12/07/2018 to 21/07/2018(10 days).

Date: July 21, 2018

  
CO-ORDINATOR

(Seal)

  
OFFICER IN CHARGE

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

# CERTIFICATE

OF INTERNSHIP

Certificate No: SDC074/IN/0718

THIS CERTIFICATE IS PROUDLY PRESENTED TO:

*Abhishek B*

has Successfully Completed Internship in Ethical Hacking  
in Stepz Development Centre, Kottayam

The Internship was conducted from 09/07/2018 to 13/07/2018

*Stepz*

Shasby Kuruvilla

CENTRE HEAD



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FOR LIVE CAREERS

**STEPZ**  
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**ESSI**  
Building mind, its function



30/12/2017

CERTIFICATE

This is to certify that Sherin Joseph, having the university register number : MLM17CS059, B.Tech Computer Science Engineering student of Mangalam College of Engineering, Ettumanoor has successfully completed internship training program in 'Basic Java Android Development' at IBAND Technologies, Infopark, Kochi from 19/12/2017 to 30/12/2017.

For IBAND Technologies



HR Manager



PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Kerala State Electronics Development Corporation Ltd.  
(A Government of Kerala Undertaking)

**KELTRON**<sup>®</sup>  
I.T. Business Group  
CIN: U74999KL1972SGC002450

**Keltron Knowledge Centre**

1<sup>st</sup> Floor, Municipal Shopping Complex, Nagampadam Pvt. Bus Stand (South side), Kottayam-686 001, Phone: 0481-2304031  
Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikuzhy, Phone: 0481-2571361 | Website Link : ksg.keltron.in

KSG/60/INTP/17-07/L1963

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ALPHONSA JOSE
College Register No	MLM16EE007
Keltron Register No	K1760I110112
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head   
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

Regd: Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444

Visit us at our website : <http://www.keltron.org>

**Keltron Knowledge Centre**

1<sup>st</sup> Floor, Municipal Shopping Complex, Nagampadam Pvt. Bus Stand (South side), Kottayam-686 001, Phone. 0481-2304031  
Kaduthuruthy, Phone 0482-9282127 || Pala, Phone 0482-2212025 || Kanjikuzhy, Phone 0481-2571361 || Website Link ksg keltron in

KSG/60/INTP/17-07/L1957

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ARYA KRISHNAN C
College Register No	MLM16EE018
Keltron Register No	K1760I110106
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR

Kerala State Electronics Development Corporation Ltd.

(A Government of Kerala Undertaking)

**KELTRON**  
I.T. Business Group  
CIN U74999KL1972SGC002450

**Keltron Knowledge Centre**

1<sup>st</sup> Floor, Municipal Shopping Complex, Nagampadam Pvt. Bus Stand (South side), Kottayam-686 001, Phone: 0481-2304031  
Kaduthuruthy, Phone: 0482-9282127 || Pala, Phone: 0482-2212025 || Kanjikuzhy, Phone: 0481-2571361 || Website Link - ksg.keltron.in

28.07.17

KSG/60/INTP/17-07/L1967

### CERTIFICATE

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. JEFFI M JINU
College Register No	MLM16EE027
Keltron Register No	K1760I110092
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

W. J. M.

Regd. Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444  
Visit us at our website : <http://www.keltron.org>



Kerala State Electronics Development Corporation Ltd.  
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## Keltron Knowledge Centre

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Kaduthuruthy, Phone: 0482-9282127 || Pala, Phone: 0482-2212025 || Kanjikuzhy, Phone: 0481-2571361 || Website Link : [ksg.keltron.in](http://ksg.keltron.in)

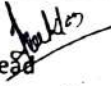
KSG/60/INTP/17-07/L1962

28.07.17

### CERTIFICATE

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. MARY JOSMA K V
College Register No	MLM16EE030
Keltron Register No	K1760I110111
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Hesa  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Regd: Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444  
Visit us at our website : <http://www.keltron.org>

Kerala State Electronics Development Corporation Ltd.  
(A Government of Kerala Undertaking)

**KELTRON**  
**I.T. Business Group**  
CIN: U74999KL19725GC002450

## Keltron Knowledge Centre

1<sup>st</sup> Floor, Municipal Shopping Complex, Nagampadam Pvt Bus Stand (South side), Kottayam-688 001, Phone: 0481-2304031  
Kaduthuruthy. Phone 0482-9282127 | Pala. Phone 0482 2212025 | Kanjikuzhy. Phone 0481-2571361 | Website Link [ksg.keltron.in](http://ksg.keltron.in)

KSG/60/INTP/17-07/L1971

28.07.17

### CERTIFICATE

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Mr. NITHIN T S
College Register No	MLM16EE034
Keltron Register No	K17601110099
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 to 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Regd: Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444

Visit us at our website : <http://www.keltron.org>

**Keltron Knowledge Centre**

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Kaduthuruthy, Phone: 0482-9282127 || Pala, Phone: 0482-2212025 || Kanjikuzhy, Phone: 0481-2571361 || Website Link : ksg.keltron.in

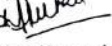
KSG/60/INTP/17-07/L1953

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	SANU S JOHN
College Register No	MLM16EE037
Keltron Register No	K1760I110095
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head   
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
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Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikuzhy, Phone: 0481-2571361 | Website Link: [ksg.keltron.in](http://ksg.keltron.in)

KSG/60/INTP/17-07/L1959

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	NEHNU BASHEER
College Register No	MUM1611032
Keltron Register No	K17601110108
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

**Keltron Knowledge Centre**

7<sup>th</sup> Floor, Municipal Shopping Complex, Nagampadam Pvt. Bus Stand (South side), Kottayam-686 001, Phone: 0481-2304031  
Kaduthuruthy, Phone: 0482-8282127 | Pala, Phone: 0482-2212025 | Kanjikuzhy, Phone: 0481-2571361 | Website Link: ksg.keltron.in

KSG/60/INTP/17-07/L1961

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. Wafa Basheer
College Register No	MLM16EE043
Keltron Register No	K1760110110
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head   
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

Kerala State Electronics Development Corporation Ltd.

(A Government of Kerala Undertaking)

**Keltron Knowledge Centre**

**KELTRON**

**I.T. Business Group**

CIN U74999KL19725GC002450

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Kaduthuruthy, Phone: 0482-9282127 || Pala, Phone: 0482-2212025 || Kanjikuzhy, Phone: 0481-2571361 | Website Link: [ksg.keltron.in](http://ksg.keltron.in)

KSG/60/INTP/17-07/L1961

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. Wafa Basheer
College Register No	MLM16EE043
Keltron Register No	K1760I110110
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.

Prepared by: Manumol M



Verified by: Sreekala B

Regd. Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444

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Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikuzhy, Phone: 0481-2571361 | Website Link: [ksg.keltron.in](http://ksg.keltron.in)

KSG/60/INTP/17-07/L1965

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Mr. ALAN JACOB
College Register No	MLM16EE004
Keltron Register No	K1760I110102
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
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KSG/60/INTP/17-07/L1955

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Mr. ALSUFIYAN NAZIM P N
College Register No	MLM16EE008
Keltron Register No	K1760I110104
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head   
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
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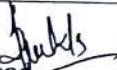
KSG/60/INTP/17-07/L1966

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Mr. AROMEL K S
College Register No	MLM16EE015
Keltron Register No	K1760I110091
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
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MANGALAM COLLEGE OF ENGINEERING  
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67/6

Kerala State Electronics Development Corporation Ltd.

(A Government of Kerala Undertaking)



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Kaduthuruthy, Phone: 0482-9282127 || Pala, Phone: 0482-2212025 || Kanjikkuzhy, Phone: 0481-2571361 || Website Link : ksg.keltron.in

KSG/60/INTP/17-07/L1958

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ARATHY JAYAPRAKASH
College Register No	MLM16EE012
Keltron Register No	K1760I110107
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

*[Signature]*  
Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

*[Signature]*

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

49p

Kerala State Electronics Development Corporation Ltd.

(A Government of Kerala Undertaking)

**KELTRON**  
 I.T. Business Group  
 CIN: U74909KL19725GC002450

**Keltron Knowledge Centre**

 1<sup>st</sup> Floor, Kerala State Electronics Development Corporation, Nagampadam P.V. Bus Stand (South side), Kottayam-686 001, Phone: 0481-2304031  
 Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikkuzhy, Phone: 0481-2571361 | Website Link: ksg.keltron.in

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Mr. ANAL E S
College Register No	MLM16EE009
Keltron Register No	K1760I110100
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 to 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

*[Signature]*  
 Head  
 Keltron Knowledge Centre  
 Pala.



Prepared by: Manumol M

Verified by: Sreekala B

*[Signature]*  
 PRINCIPAL  
 MANGALAM COLLEGE OF ENGINEERING



**KERALA STATE ELECTRICITY BOARD**

Office of the Assistant Engineer

Electrical Section, Kakkad - 689001

Pathanamthitta Dist, Kerala, India

Phone No: 914 323000, 01960001

Fax No: 914 323000, 01960001

E-mail: ase@kseb.com



**CERTIFICATE**

This is to certify that Mr Emmanuel Joseph, B.Tech Electrical and Electronics Engineering student of Believer's Church Engineering College, Perunad, Pathanamthitta has undergone and successfully completed in plant/industrial Training for five Days in our company during the period from 16, 17, 19, 20 and 21st 2017



*Amranta*  
Sub Engineer in charge  
Electrical Section  
Kakkad, Seethathodu

*[Signature]*  
PRINCIPAL  
BELIEVER'S COLLEGE OF ENGINEERING  
PERUNAD



# TRANSFORMERS AND ELECTRICALS KERALA LIMITED

(A Joint Venture of Government of Kerala & NTPC Limited)



Our Ref: TR/36/17-18/

17<sup>th</sup> June 2017

## CERTIFICATE

This is to certify that Ms. JESTINA ANN THOMAS, 2<sup>nd</sup> Semester B.Tech Electrical and Electronics Engineering student of Believers Church Caarmel Engineering College, Perunad, Pathanamthitta has undergone and successfully completed In-plant/Industrial Training for three days in our Company during the period from 15.06.2017 to 17.06.2017.



*[Signature]*  
MANAGER (HR)

The Principal,  
Believers Church Caarmel Engineering College,  
Koonamkara P.O., Ranni-Perunad,  
Pathanamthitta - 689 711.

*[Signature]*  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

ANGAMALLY SOUTH P.O., PIN. - 683 573, ERNAKULAM DISTRICT, KERALA, INDIA.

Phone : 0484 - 2510251 Fax : 0484 - 2452873, 2452363, 2458995

E-mail: edp@telk.com, ceooffice@telk.com, hrm@telk.com, mtl@telk.com, marketing@telk.com, finance@telk.com

website : www.telk.com

CIN-U31102KL1963SGC002043



# TRANSFORMERS AND ELECTRICALS KERALA LIMITED

(A Joint Venture of Government of Kerala & NTPC Limited)



Our Ref: 9/R/36/17-18/

17<sup>th</sup> June 2017

## CERTIFICATE

This is to certify that Ms. JUSTINA ANN THOMAS, 2<sup>nd</sup> Semester B.Tech Electrical and Electronics Engineering student of Believers Church Caarmel Engineering College, Perunad, Pathanamthitta has undergone and successfully completed In-plant/Industrial Training for three days in our Company during the period from 15.06.2017 to 17.06.2017.



*[Signature]*  
MANAGER (HR)

The Principal,  
Believers Church Caarmel Engineering College,  
Koonamkara P.O., Ranni-Perunad,  
Pathanamthitta - 689 711.

*[Signature]*

ANGAMALLY SOUTH P.O., PIN. - 683 573, ERNAKULAM DISTRICT, KERALA, INDIA.

Phone : 0484 - 2510251 Fax : 0484 - 2452873, 2452363, 2458995

E-mail: edp@telk.com, ceoffice@telk.com, hrm@telk.com, mtl@telk.com, marketing@telk.com, finance@telk.com

website : [www.telk.com](http://www.telk.com)

CIN-U31102KL1963SGC002043



# TRANSFORMERS AND ELECTRICALS KERALA LIMITED

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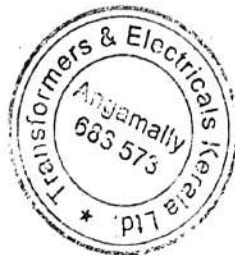


Our Ref :  
HR/36/17-18/

17<sup>th</sup> June 2017

## CERTIFICATE

This is to certify that Mr. MITHUN MOHANAN, 2<sup>nd</sup> Semester B.Tech Electrical and Electronics Engineering student of Believers Church Caarmel Engineering College, Perunad, Pathanamthitta has undergone and successfully completed In-plant/Industrial Training for three days in our Company during the period from 15.06.2017 to 17.06.2017.



*[Handwritten Signature]*  
MANAGER (HR)

The Principal,  
Believers Church Caarmel Engineering College,  
Koonamkara P.O., Ranni-Perunad,  
Pathanamthitta – 689 711.

*[Handwritten Signature]*

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

ANGAMALLY SOUTH P.O., PIN. - 683 573, ERNAKULAM DISTRICT, KERALA, INDIA.

Phone : 0484 - 2510251 Fax : 0484 - 2452873, 2452363, 2458995

E-mail: edp@telk.com, ceooffice@telk.com, hrm@telk.com, intl@telk.com, marketing@telk.com, finance@telk.com  
website: www.telk.com

TELK-031102KE19633GC002043



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. HENDRY K. JOSEPH** of **MANGALAM COLLEGE OF ENGINEERING**  
in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**  
The internship was conducted between **19/07/2017** and **24/07/2017**

**MANGALAM COLLEGE OF ENGINEERING**  
Ettumanoor

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadukara Building, 11th Floor  
Near North Malabar Grammeen Bank  
Pampady P. O., Kottayam-686 521

**Managing Director**





**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. EMIL ABRAHAM** ----- of

**MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between **19/07/2017** and **24/07/2017** -----

**PRINCIPAL**  
**MANGALAM COLLEGE OF ENGINEERING**  
Ettimanoor

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Mudokara Building, 11th Floor  
Near North Malabar Gramene Bank  
Pampady P. O., Kottayam-686 521

*Abraham*  
**Managing Director**



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to


**Mr. EMIL ABRAHAM**..... of

**MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between 19/07/2017 and 24/07/2017

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

  
POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS  
Vadakkann Building, 11nd Floor  
Near North Malabar Gramreen Bank  
Pampady, P. O., Kottayam-686 521

Managing Director



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. ALLEN JOHN ABRAHAM** of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between 19/07/2017 and 24/07/2017

**PRINCIPAL**  
**MANGALAM COLLEGE OF ENGINEERING**  
Ettumanoor

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadakkara Building, 11nd Floor  
Near North Malabar Grammeen Bank  
Pampady P. O., Kottayam-686 521

**Managing Director**



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. ANANDHU K.B** of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between **19/07/2017** and **24/07/2017**

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS  
Vadakkara Building, 11th Floor  
Near North Malabar Grammeen Bank  
Pampady P. O., Kottayam-686 521

  
Managing Director



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. ANANDHU K.B** ----- of

**MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between 19/07/2017 and 24/07/2017 -----

MANGALAM COLLEGE OF ENGINEERING  
ETTUAMANOOR

POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS  
Vadakkara Building, IInd Floor  
Near North Malabar Gramen Bank  
Pampady P. O., Kottayam-686 521

Managing Director



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. ALLEN JOHN ABRAHAM** of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between **19/07/2017** and **24/07/2017**

**PRINCIPAL**  
**MANGALAM COLLEGE OF ENGINEERING**  
Ettimancher

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadakkara Building, 11nd Floor  
Near North Malabar Gramteen Bank  
Pampady P. O., Kottayam-686 521

**Managing Director**



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. DEEPAK SIBY** of **MANGALAM COLLEGE OF ENGINEERING**  
in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**  
The internship was conducted between **19/07/2017** and **24/07/2017**

**PRINCIPAL**  
**MANGALAM COLLEGE OF ENGINEERING**  
Ettumanoor

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadakkara Building, 11nd Floor  
Near North Malabar Grapeen Bank  
Pampady P.O., Kottayam-686 521

**Managing Director**



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. BIMAL M. GEORGE** of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between **19/07/2017** and **24/07/2017**

  
MANGALAM COLLEGE OF ENGINEERING  
Ethamangal

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadakkara Building, IInd Floor  
Near North Malabar Grammeen Bank  
Pampady P. O., Kottayam-686 511  
  
Managing Director





**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. ABY JOSE JACOB**

of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between 19/07/2017 and 24/07/2017

**PRINCIPAL**  
**MANGALAM COLLEGE OF ENGINEERING**  
Ettumanoor

**POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadakara Building, IInd Floor  
Near North Malabar Grammeen Bank  
Pampady, P.O., Kottayam-686 521

**Managing Director**



# POWER SELL

**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

## **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Mr. ABY JOSE JACOB** ----- of

**MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between 19/07/2017 and 24/07/2017

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
EILHERRYKOT

POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS,  
Vadakkara Building, IInd Floor  
Near North Malabar Gramscen Bank  
Pampaddy, P. O., Kottayam-686 521

Managing Director



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**  
PAMPADY, KOTTAYAM.

# **CERTIFICATE** *of* **INTERNSHIP**

We present this certificate to

**Miss. SREELEKSHMI K.S.**..... of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between 19/07/2017 and 24/07/2017

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
ETHURAIYER

POWER SELL  
ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS  
Vadakkara Building, 11nd Floor  
Near North Malabar Grammeen Band  
Pampady P.O., Kottayam-686 521



**ELECTRICAL CONSULTANTS  
DESIGNERS & CONTRACTORS**

**PAMPADY, KOTTAYAM.**

# **CERTIFICATE**

*of*  
**INTERNSHIP**

We present this certificate to

**Miss. SREELEKSHMI K.S.** of **MANGALAM COLLEGE OF ENGINEERING**

in appreciation for your successful work as an intern at **POWER SELL CONSULTANTS**

The internship was conducted between **19/07/2017** and **24/07/2017**

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KOTTAYAM

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ELECTRICAL CONSULTANTS,  
DESIGNERS & CONTRACTORS**  
Vadakkara Building, 11nd Floor  
Near North Malabar Grammen Bank  
**Pampady P.O., Kottayam-686 521**

**Managing Director**

Kerala State Electronics Development Corporation Ltd  
(A Government of Kerala Undertaking)



Keltron Knowledge Centre  
City Centre, Thiruvananthapuram

**Keltron Knowledge Centre**

17, City Centre, Thiruvananthapuram. Phone: 0471-2511111. Fax: 0471-2511112. Email: keltron@ksc.keltron.org

**CERTIFICATE**

certified that the student has completed the internship conducted at KELTRON as per the specifications given below:

Name of the Student	Mr. ALAN SEBASTIAN THOMAS
College Register No	MA11011518
Keltron Register No	KT100110116
Branch/Department	B Tech in Electrical & Electronics Engineering
Year/Semester	3 <sup>rd</sup> Semester
Address of college	MANALAYAM COLLEGE OF ENGINEERING, THIRUVANANTHAPURAM KUTTIYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10.07.2011 to 14.08.2011
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PCB Architecture, Panel wiring diagram and panel wiring (practical) and source wiring, Emergency switch wiring
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Mominul M

Verified by: Neeleha B

*(Handwritten signature)*  
KELTRON  
Kerala State Electronics Development Corporation  
17, City Centre, Thiruvananthapuram

Kerala State Electronics Development Corporation Ltd.  
(A Government of Kerala Undertaking)

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### Keltron Knowledge Centre

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Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikkuzhy, Phone: 0481-2571361 | Website Link : ksg.keltron.in

### CERTIFICATE

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. APARNA CHANDRAN
College Register No	MLM16EE011
Keltron Register No	K1760I110109
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

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MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**Keltron Knowledge Centre**

1<sup>st</sup> Floor, Municipal Shopping Complex, Nagampadam P.V. Bus Stand (South side), Kottayam-686 001, Phone 0481-2304031  
Kaduthuruthy Phone 0482-9282127 || Pala, Phone 0482-2212025 || Kanjikuzhy, Phone 0481-2571361 || Website Link: [ksg.keltron.in](http://ksg.keltron.in)

KSG/60/INTP/17-07/11963

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ALPHONSA JOSE
College Register No	MLM16EE007
Keltron Register No	K1760I110112
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.

Prepared by: Manumol M



Verified by: Sreekala B

  
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**KELTRON**  
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**Keltron Knowledge Centre**

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Kaduthuruthy, Phone: 0482-9282127 || Pala, Phone: 0482-2212025 || Kanjikuzhy, Phone: 0481-2571361 || Website Link: ksg.keltron.in

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. APARNA CHANDRAN
College Register No	MLM16EE011
Keltron Register No	K1760I110109
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

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Regd: Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444

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**Keltron Knowledge Centre**

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Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikuzhy, Phone: 0481-2571361 | Website Link : [ksg.keltron.in](http://ksg.keltron.in)


KSG/60/INTP/17-07/L1951

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ASHLY RATHEN
College Register No	MLM16EE019
Keltron Register No	K1760I110101
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
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Kaduthuruthy, Phone 0482-9282127 | Pala, Phone 0482 2212025 | Kanjikuzhy, Phone 0481-2571361 | Website Link : [ksg.keltron.in](http://ksg.keltron.in)


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**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Mr. ARUN BABURAJ
College Register No	MLM16EE016
Keltron Register No	K1760I110105
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
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Kaduthuruthy, Phone 0482-9282127 || Pala, Phone 0482-2212025 || Kanjikuzhy, Phone 0481-2571361 || Website Link: ksg keltron in


KSG/60/INTP/17-07/L1951

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ASHLY RATHEN
College Register No	MLM16EE019
Keltron Register No	K17601110101
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

  
Head  
Keltron Knowledge Centre  
Pala.





Prepared by: Manumol M

— Verified by: Sreekala B

**Keltron Knowledge Centre**

1<sup>st</sup> Floor, Municipal Shopping Complex, Nagampadam Pvt. Bus Stand (South side), Kottayam-686 001, Phone: 0481-2304031  
Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjlkuzhy, Phone: 0481-2571381 | Website Link : [ksg.keltron.in](http://ksg.keltron.in)  
KSG/60/INTP/17-07/L1957

28.07.17

**CERTIFICATE**

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms.ARYA KRISHNAN C
College Register No	MLM16EE018
Keltron Register No	K1760I110106
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
Program Category	INTERNSHIP
Period of Program	10-07-2017 TO 14-07-2017
Program Done at	Keltron Knowledge Centre, Pala.
Area of Expertise	Motor basics, single phase motor and types of motor, Relay basics and connections, PLC Architecture, Panel wiring diagram and panel wiring (Practical) Sink/Source wiring, Emergency Switch wiring.
STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

  
PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

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**Keltron Knowledge Centre**

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CIN: U74000KL1972SGC002450

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Kaduthuruthy, Phone: 0482-9282127 | Pala, Phone: 0482-2212025 | Kanjikkuzhy, Phone: 0481-2571361 | Website Link: [ksg.keltron.in](http://ksg.keltron.in)

KSG/60/INTP/17-07/11963

28.07.17

### CERTIFICATE

Certified that the student has completed the Internship conducted at KELTRON as per the particulars given below:

Name of the Student	Ms. ALPHONSA JOSE
College Register No	MLM16EE007
Keltron Register No	K1760I110112
Branch/Discipline	B. Tech in Electrical & Electronics Engineering
Year/Semester	2 <sup>nd</sup> Semester
Address of College	MANGALAM COLLEGE OF ENGINEERING, ETTUMANOOR, KOTTAYAM
University	APJ Abdul Kalam Technical University
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STATUS OF PROGRAM	COMPLETED SUCCESSFULLY

Head  
Keltron Knowledge Centre  
Pala.



Prepared by: Manumol M

Verified by: Sreekala B

*(Handwritten signature)*

Regd: Office : Keltron House, Vellayambalam, Thiruvananthapuram-695 033, Tel: 0471-4094444

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

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ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "WASTE HEAT TO ELECTRICITY" is a record of the bonafide work done by NIMMY PATRICK (Reg.NO.14008302) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering,

*Liya*  
12/4/17

Mrs. LIYA ALIAS

Asst:Professor

SEMINAR GUIDE



*Benny*  
14/4/17

Mr. BENNY K.K.

Asso Prof

HOD,EEE,MLMCE

Ettumanoor, Kottayam, during the academic year 2017-18

*[Signature]*

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

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ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "DEVELOPMENT OF A SOFR EXOSKELETON GLOVE FOR DISABLED" is a record of the bonafide work done by PREMSHANKAR P (Reg.NO.14008303) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering.

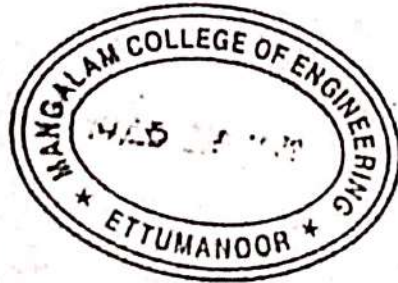
  
10/7/17

Mrs. Liya Alias

Assistant Professor

Seminar Guide

Dept. of EEE



  
14/4/17

Mr. Benny K.K

Associate Professor

Head of the Department

Dept. of EE

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Ettumanoor



Ettumanoor, Kottayam, during the academic year 2017-18



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

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ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "DEVELOPMENT OF A WIND POWER SYSTEM ON TRUCKS" is a record of the bonafide work done by PARVATHY S.MENON (Reg.NO.14008304) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering,

*Liya*  
16/11/17

Mrs. Liya Alias

Assistant Professor

Seminar Guide

Dept. of EEE



*Benny*  
16/11/17

Mr. Benny K.K

Associate Professor

Head of the Department

Dept. of EE

*[Signature]*

Ettumanoor, Kottayam, during the academic year 2017-18

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING  
**MANGALAM COLLEGE OF ENGINEERING**

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ETTUMANOOR, KOTTAYAM

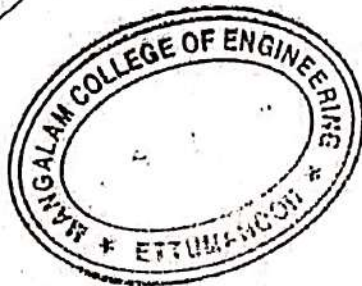
**CERTIFICATE**

This is to certify that the seminar titled "NUCLEAR BATTERY" is a record of the bonafide work done by EVIN XAVIER K J (Reg.NO.14008291) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering,

Mr. AJU THOMAS

Asst:Professor

SEMINAR GUIDE



Mr. BENNY K K

Asso Prof

HOD,EEE,MLMCE

Ettumanoor, Kottayam, during the academic year 2017-18

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

(Affiliated to Mahatma Gandhi University)

ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "SELF-RECHARGEABLE PAPER THIN FILM BATTERIES PERFORMANCE AND APPLICATIONS" is a record of the bonafide work done by **ARYA K AJAYAN** (Reg No:14008287) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (BTech) in **ELECTRICAL AND ELECTRONICS** of Mangalam College of Engineering.

Guided By:  
**Mr. Jeneesh Scaria**  
Assistant Professor  
Electrical & Electronics



Head of the Department  
**Mr. Benny K.K.**  
Associate Professor & HOD  
Electrical & Electronics

PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

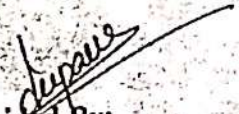
**MANGALAM COLLEGE OF ENGINEERING**


(Affiliated to Mahatma Gandhi University)

ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the Seminar titled "Distributed Power Generation System and Protection" is a record of the bonafide work done by NIKHIL JOINSON (Reg. No. 14008301) submitted in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology (BTech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering, Ettumanoor, Kottayam, during the academic year 2017-18.

  
Guided By:  
Mrs Jeepa K J  
Assistant Professor  
Electrical & Electronics Engg

  
Head of the Department  
Mr Benny K.K.  
Associate Professor & HOD  
Electrical & Electronics Engg

  
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MANGALAM COLLEGE OF ENGINEERING  
Ettumanoor

**MANGALAM COLLEGE OF ENGINEERING ETTUMANOOR,  
KOTTAYAM**



**CERTIFICATE**

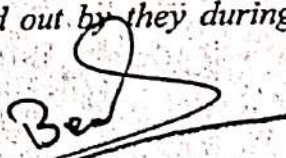
*This is to certify that the project report entitled "PREPAID ELECTRICITY USING POWER LINE MODEM" by ABHIJITH M S (Register No:14008281), EVIN XAVIER K J. (Register No:14008291), HARI B NAIR(Register No:14008293), JOISE JOSE GEORGE (Register No:14008198), SMITH MATHEW PARACKAMANNIL (Register No:14008307), submitted towards partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam a bonafide record of work carried out by them during the seventh semester(2017-2018).*

  
Project Guide

Mrs. Jeepa K J  
Assistant Professor  
Dept. of EEE

Internal Examiner

Place :  
Date :

  
Head of the Department

Mr. Benny K K  
Associate Professor  
Dept. of EEE

External Examiner



MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR

**MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR, KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project report entitled "SMART VERTICAL FARMING USING HYDROPONICS" by ARJUNBYJU(RegNo:14008167), AKHILKRISHNA(RegNo:14008284),BILKINKSUNNY(RegNo:14008288), RAVIKUMAR(Reg No:14008314),VIPIN BABU (Reg No:14008313),submitted towards partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam is a bonafide record of work carried out by us during the academic year 2017-2018.*

**Project Guide**

*Neeba Sabu*  
**Mrs. Neeba Sabu**

**Assistant Professor**

**Dept. of EEE**

*Benny K K*  
**Head of the Department**

**Mr. Benny K K**

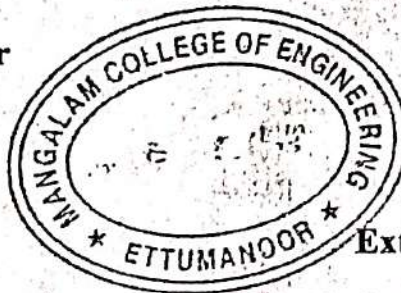
**Associate Professor**

**Dept. of EEE**

**Internal Examiner**

**Place :**

**Date :**



**External Examiner**

*[Signature]*  
MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR



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ETTUMANOOR, KOTTAYAM

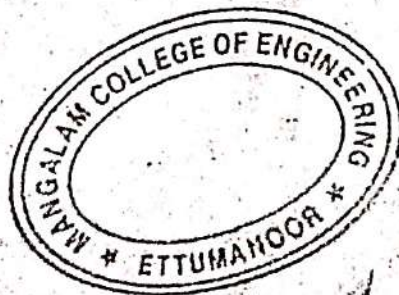
## CERTIFICATE

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Rahumath Beeby.K.A.

Assistant Professor

Seminar Coordinator



Benny, K.K.

Associate Professor

HOD, EEE, MLMCE

Ettumanoor, Kottayam, during the academic year 2017-18

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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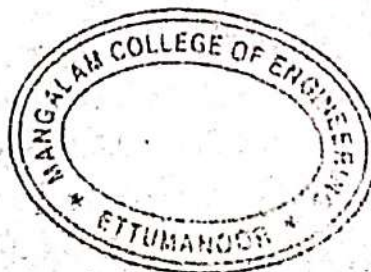
ETTUMANOOR, KOTTAYAM

## CERTIFICATE

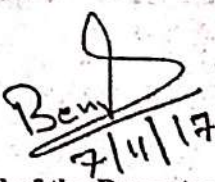
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Guided By:

  
Mrs. Meera Rose Cherian  
Assistant Professor  
Electrical & Electronics



Head of the Department.

  
7/11/17  
Mr. Benny K.K.  
Assistant Professor & HOD  
Electrical & Electronics



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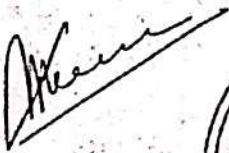
## MANGALAM COLLEGE OF ENGINEERING

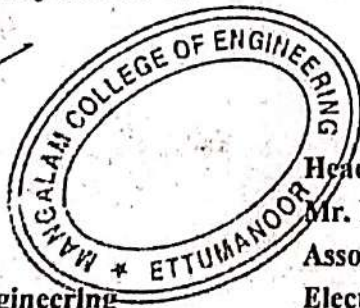
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ETTUMANOOR, KOTTAYAM

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Guided By:   
Mrs. Meera Rose Cherian  
Assistant Professor  
Electrical & Electronics Engineering



  
Head of the Department  
Mr. Benny K.K.  
Associate Professor & HOD  
Electrical & Electronics Engineering

  
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Ettumanoor





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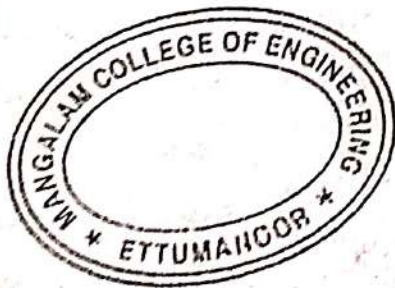
ETTUMANOOR, KOTTAYAM

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*T.D. Subash*  
14/4/17

Guided By:  
Dr. T.D. Subash  
Professor  
Electrical & Electronics Engineering



*Benny K.K.*  
14/4/17

Head of the Department  
Mr. Benny K.K.  
Associate Professor & HOD  
Electrical & Electronics Engineering

*[Signature]*

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING


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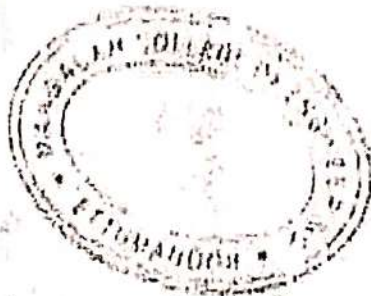
(Affiliated to Mahatma Jyotiba University)


ETIMANNOOR, KOTTAYAM

### CERTIFICATE

This is to certify that the Seminar titled "AXIAL FLUX PERMANENT MAGNET BLDC" is a record of the bonafide work done by SMITH MATHEW PARACKAMANNIL (Reg. No 14008307) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering, Ettimanoor, Kottayam, during the academic year 2017-18.

Guided By   
Ms. Pargens Peter  
Assistant Professor  
Electrical & Electronics



  
Head of the Department  
Mr. Benny K.K  
Assistant Professor & HOD  
Electrical & Electronics

  
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Ettimanoor



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING


## MANGALAM COLLEGE OF ENGINEERING

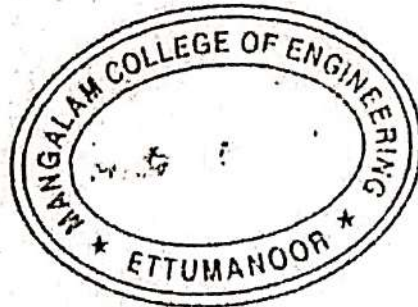
(Affiliated to Mahatma Gandhi University)

ETTUMANOOR, KOTTAYAM

### CERTIFICATE

This is to certify that the Seminar titled "AN IOT BASED FIRE ALARMING USING RASPBERRY PI3" is a record of the bonafide work done by DHANESH KRISHNAN (Reg. No. 14008289) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (BTech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering, Ettumanoor, Kottayam, during the academic year 2017-18.

Guided By:   
Mrs. Dhanya.S  
Assistant Professor  
Electrical & Electronics



  
7/11/17  
Head of the Department  
Mr. Benny K.K.  
Assistant Professor & HOD  
Electrical & Electronics



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ETTUMANOOR, KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project entitled "ACTIVE SIGNBOARD FOR VEHICLES" by AJITH P S (Register No: 14008283), DHANESH KRISHNAN (Register No: 14008289), GOKUL S (Register No: 14008292), LIJO JOHN (Register No: 14008297), submitted towards partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi Uniuersity, Kottayam, is a bonafide record of work carried out by them during the academic year 2017-2018.*

**Project Guide:**

**Mrs. Dhanya S**

**Assistant Professor**

**Dept. of EEE**

**Internal Examiner**

**Place :**

**Date :**

**Head of the Department:**

**Mr. Benny K.K**

**Associate Professor**

**Dept. of EEE**

**External Examiner**

**MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR, KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project report entitled "TRANSFORMER MONITORING USING ANDROID APPLICATION" by PARVATHY S.MENON (14008304), RENNY K VARGHESE (14008305), TINU CYRIAC (14008310) and VINED MATHEW (14008312) submitted towards partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam is a bonafide record of work carried out by him/her during the academic year (2017-2018).*

**Project Guide**

**Mr. Rahul.P**

**Assistant Professor**

**Dept. of EEE**

**Head of the Department**

**Mr. Benny K K**

**Associate Professor**

**Dept. of EEE**

**Internal Examiner**

**External Examiner**

**Place :**

**Date :**

**MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR**

**MANGALAM COLLEGE OF ENGINEERING**  
**ETTUMANOOR, KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project report entitled "ADVANCED AUTOMATIC WASTE DISPOSABLE SYSTEM" by AINU ANN MATHEW(14007976), ARYA K AJAYAN(14008287), SANJU S OOMMEN(14008306), AKSHAY T.S(14008285), submitted towards partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam a bonafide record of work carried out by their during the academic year(2017-2018).*

Project Guide

**Mrs. Shoma Mani**  
**Assistant Professor**  
**Dept. of EEE**

Head of the Department

**Mr. Benny K K**  
**Associate Professor**  
**Dept. of EEE**

Internal Examiner

External Examiner

Place: Ettumanoor

Date: 27/3/18

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ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "WASTE HEAT TO ELECTRICITY" is a record of the bonafide work done by NIMMY PATRICK (Reg.NO.14008302) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering,

*Liya*  
12/4/17

Mrs. LIYA ALIAS

Asst:Professor

SEMINAR GUIDE



*Benny*  
14/4/17

Mr. BENNY K.K.

Asso Prof

HOD,EEE,MLMCE

Ettumanoor, Kottayam, during the academic year 2017-18

*[Signature]*

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## CERTIFICATE

This is to certify that the seminar titled "DEVELOPMENT OF A SOFR EXOSKELETON GLOVE FOR DISABLED" is a record of the bonafide work done by PREMSHANKAR P (Reg.NO.14008303) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering.

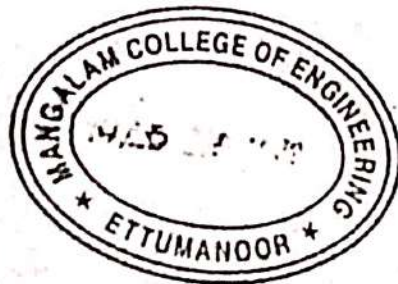
  
10/7/17

Mrs. Liya Alias

Assistant Professor

Seminar Guide

Dept. of EEE



  
14/4/17

Mr. Benny K.K

Associate Professor

Head of the Department

Dept. of EE

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Ettumanoor, Kottayam, during the academic year 2017-18





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ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "DEVELOPMENT OF A WIND POWER SYSTEM ON TRUCKS" is a record of the bonafide work done by PARVATHY S.MENON (Reg.NO.14008304) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering,

*Liya*  
16/11/17

Mrs. Liya Alias

Assistant Professor

Seminar Guide

Dept. of EEE



*Benny K.K.*  
16/11/17

Mr. Benny K.K

Associate Professor

Head of the Department

Dept. of EE

*[Signature]*

Ettumanoor, Kottayam, during the academic year 2017-18

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ETTUMANOOR, KOTTAYAM

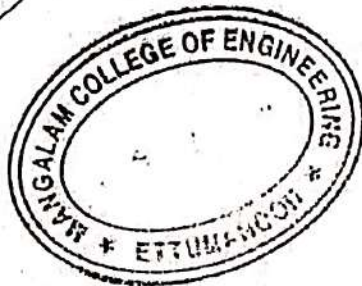
**CERTIFICATE**

This is to certify that the seminar titled "NUCLEAR BATTERY" is a record of the bonafide work done by EVIN XAVIER K J (Reg.NO.14008291) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (B.Tech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering,

Mr. AJU THOMAS

Asst:Professor

SEMINAR GUIDE



Mr. BENNY K K

Asso Prof

HOD,EEE,MLMCE

Ettumanoor, Kottayam, during the academic year 2017-18

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

(Affiliated to Mahatma Gandhi University)

ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the seminar titled "SELF-RECHARGEABLE PAPER THIN FILM BATTERIES PERFORMANCE AND APPLICATIONS" is a record of the bonafide work done by **ARYA K AJAYAN** (Reg No:14008287) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (BTech) in **ELECTRICAL AND ELECTRONICS** of Mangalam College of Engineering.

Guided By:  
**Mr. Jeneesh Scaria**  
Assistant Professor  
Electrical & Electronics



Head of the Department  
**Mr. Benny K.K.**  
Associate Professor & HOD  
Electrical & Electronics

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Ettumanoor



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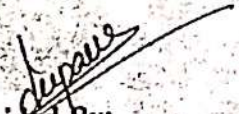
**MANGALAM COLLEGE OF ENGINEERING**


(Affiliated to Mahatma Gandhi University)

ETTUMANOOR, KOTTAYAM

## CERTIFICATE

This is to certify that the Seminar titled "Distributed Power Generation System and Protection" is a record of the bonafide work done by NIKHIL JOINSON (Reg. No. 14008301) submitted in partial fulfilment of the requirements for the award of the Degree of Bachelor of Technology (BTech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering, Ettumanoor, Kottayam, during the academic year 2017-18.

  
Guided By:  
Mrs Jeepa K J  
Assistant Professor  
Electrical & Electronics Engg

  
Head of the Department  
Mr Benny K.K.  
Associate Professor & HOD  
Electrical & Electronics Engg

  
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Ettumanoor

**MANGALAM COLLEGE OF ENGINEERING ETTUMANOOR,  
KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project report entitled "PREPAID ELECTRICITY USING POWER LINE MODEM" by ABHIJITH M S (Register No:14008281), EVIN XAVIER K J. (Register No:14008291), HARI B NAIR(Register No:14008293), JOISE JOSE GEORGE (Register No:14008198), SMITH MATHEW PARACKAMANNIL (Register No:14008307), submitted towards partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam a bonafide record of work carried out by them during the seventh semester(2017-2018).*

*Jeepa*  
Project Guide

Mrs. Jeepa K J  
Assistant Professor  
Dept. of EEE

Internal Examiner

Place :  
Date :

*Benny*  
Head of the Department

Mr. Benny K K  
Associate Professor  
Dept. of EEE

External Examiner

*[Signature]*

MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR, KOTTAYAM

**MANGALAM COLLEGE OF ENGINEERING  
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**Project Guide**

*Neeba Sabu*  
**Mrs. Neeba Sabu**

**Assistant Professor**

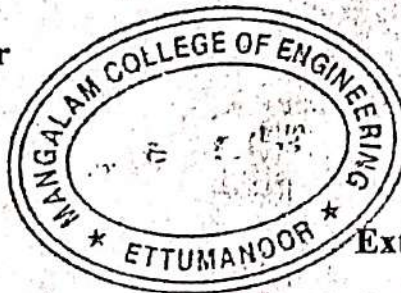
**Dept. of EEE**

*Benny K K*  
**Head of the Department**

**Mr. Benny K K**

**Associate Professor**

**Dept. of EEE**



**Internal Examiner**

**External Examiner**

**Place :**

**Date :**

*[Signature]*  
MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

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ETTUMANOOR, KOTTAYAM

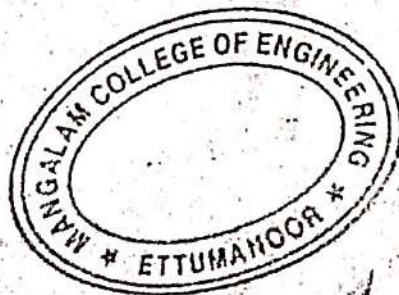
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Rahumath Beeby.K.A.

Assistant Professor

Seminar Coordinator



Benny, K.K.

Associate Professor

HOD, EEE, MLMCE

Ettumanoor, Kottayam, during the academic year 2017-18

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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

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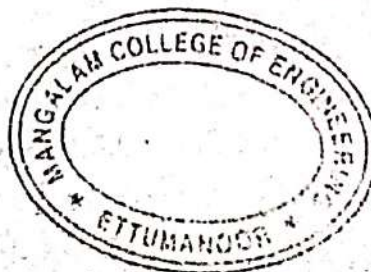
ETTUMANOOR, KOTTAYAM

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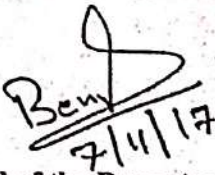
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Guided By:

  
Mrs. Meera Rose Cherian  
Assistant Professor  
Electrical & Electronics



Head of the Department.

  
7/11/17  
Mr. Benny K.K.  
Assistant Professor & HOD  
Electrical & Electronics



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ETTUMANOOR





DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

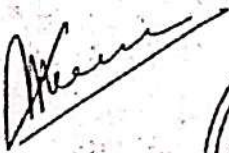
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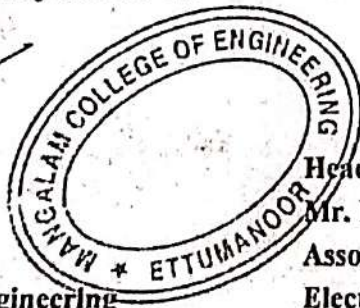
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Guided By:   
Mrs. Meera Rose Cherian  
Assistant Professor  
Electrical & Electronics Engineering



  
Head of the Department  
Mr. Benny K.K.  
Associate Professor & HOD  
Electrical & Electronics Engineering

  
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Ettumanoor



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

**MANGALAM COLLEGE OF ENGINEERING**

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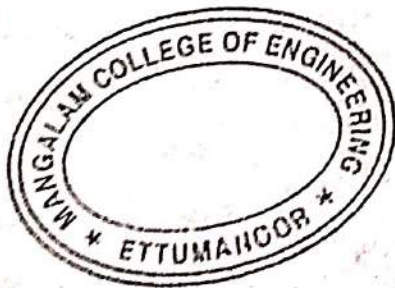
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14/4/17

Guided By:  
Dr. T.D. Subash  
Professor  
Electrical & Electronics Engineering



  
14/4/17

Head of the Department  
Mr. Benny K.K.  
Associate Professor & HOD  
Electrical & Electronics Engineering



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DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING


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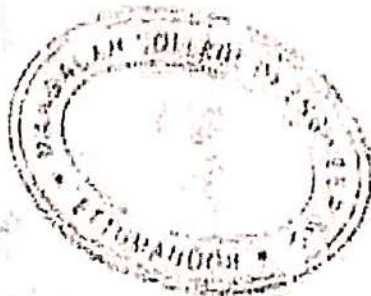
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Guided By   
Ms. Pargens Peter  
Assistant Professor  
Electrical & Electronics



  
Head of the Department  
Mr. Benny K.K  
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PRINCIPAL  
MANGALAM COLLEGE OF ENGINEERING  
Ettimannoor



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING


## MANGALAM COLLEGE OF ENGINEERING

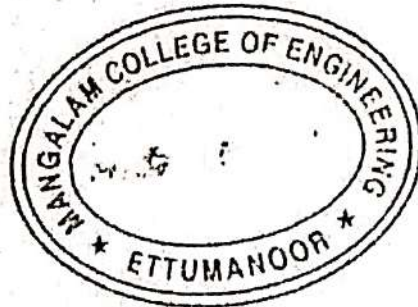
(Affiliated to Mahatma Gandhi University)

ETTUMANOOR, KOTTAYAM

### CERTIFICATE

This is to certify that the Seminar titled "AN IOT BASED FIRE ALARMING USING RASPBERRY PI3" is a record of the bonafide work done by DHANESH KRISHNAN (Reg. No. 14008289) submitted in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology (BTech) in ELECTRICAL AND ELECTRONICS of Mangalam College of Engineering, Ettumanoor, Kottayam, during the academic year 2017-18.

Guided By:   
Mrs. Dhanya.S  
Assistant Professor  
Electrical & Electronics



  
7/11/17  
Head of the Department  
Mr. Benny K.K.  
Assistant Professor & HOD  
Electrical & Electronics



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**CERTIFICATE**

*This is to certify that the project entitled "ACTIVE SIGNBOARD FOR VEHICLES" by AJITH P S (Register No: 14008283), DHANESH KRISHNAN (Register No: 14008289), GOKUL S (Register No: 14008292), LIJO JOHN (Register No: 14008297), submitted towards partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi Uniuersity, Kottayam, is a bonafide record of work carried out by them during the academic year 2017-2018.*

**Project Guide:**

**Mrs. Dhanya S**

**Assistant Professor**

**Dept. of EEE**

**Internal Examiner**

**Place :**

**Date :**

**Head of the Department:**

**Mr. Benny K.K**

**Associate Professor**

**Dept. of EEE**

**External Examiner**

**MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR, KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project report entitled "TRANSFORMER MONITORING USING ANDROID APPLICATION" by PARVATHY S.MENON (14008304), RENNY K VARGHESE (14008305), TINU CYRIAC (14008310) and VINED MATHEW (14008312) submitted towards partial fulfilment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam is a bonafide record of work carried out by him/her during the academic year (2017-2018).*

**Project Guide**

**Mr. Rahul.P**

**Assistant Professor**

**Dept. of EEE**

**Head of the Department**

**Mr. Benny K K**

**Associate Professor**

**Dept. of EEE**

**Internal Examiner**

**External Examiner**

**Place :**

**Date :**

**MANGALAM COLLEGE OF ENGINEERING  
ETTUMANOOR**

**MANGALAM COLLEGE OF ENGINEERING**  
**ETTUMANOOR, KOTTAYAM**



**CERTIFICATE**

*This is to certify that the project report entitled "ADVANCED AUTOMATIC WASTE DISPOSABLE SYSTEM" by AINU ANN MATHEW(14007976), ARYA K AJAYAN(14008287), SANJU S OOMMEN(14008306), AKSHAY T.S(14008285), submitted towards partial fulfillment of the requirements for the award of the degree of Bachelor of Technology in Electrical and Electronics Engineering of Mahatma Gandhi University, Kottayam a bonafide record of work carried out by their during the academic year(2017-2018).*

Project Guide

*Shoma Mani*  
Mrs.Shoma Mani  
Assistant Professor  
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Head of the Department

*Benny K K*  
Mr.Benny K K  
Associate Professor  
Dept. of EEE

Internal Examiner

Place : Ettumanoor

Date : 27/3/18

External Examiner

*[Signature]*  
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