

**A report
on
Industrial visit**



efftronics[®]
To provide insight for enhancing wealth

**Efftronics Systems Pvt Ltd
Mangalagiri**

Date of visit: 23.12.2022

by



**DEPARTMENT OF ELECTRONICS & COMMUNICATION ENGINEERING
KONERU LAKSHMAIAH EDUCATION FOUNDATION**

(Deemed to be University estd, u/s, 3 of the UGC Act, 956)

(NAAC Accredited "A++" Grated University)

Green Fields, Guntur District, AP, India – 522 502

INDUSTRIAL VISIT EFFTRONICS PVT LTD, MANGALGIRI

DATE : 23. 12. 2022
SECTION : III YEAR
EVENT : Industrial Visit/ Field Visit

Faculty Coordinators:

- 1) Dr. Lakshman Pappula, Associate Professor & Dy. HoD, ECE
- 2) Dr. S. Arunmetha, Associate Professor, ECE
- 3) Dr. A Aravindhana, Associate Professor, ECE
- 4) Ms. V Sahiti, Assistant Professor, ECE

EVENT DESCRIPTION:

An industrial visit has been organized by the department of Electronics and Communication Engineering for III-year II semester students on 23-DEC-2022 between 14:00 to 17:00hrs. The visit's main objective was to provide technical exposure to acquiring practical knowledge in Electronic System Design, the Internet of Things, and Smart systems. Total 59 students of III-year ECE of KLEF visited Efftronics Systems Pvt Ltd, Mangalagiri along with the 4 faculty Coordinators. The industry people gave a seminar about their company Efftronics and their present ongoing projects smart signaling, smart cities, LED, PCB manufacturing and discussed IoT. After that, we went into the industry, and they showed their projects and gave demonstrations about all their projects.

ABOUT THE COMPANY:

Efftronics Systems Pvt. Ltd. is a CMMI Dev Level 3 Ver 2.0 appraised Company. It is an end-to-end IoT solution provider Smart & Innovative Solutions for Smart Cities, Buildings, Signaling for railways & IoT Services by Automation and Digitization for Vibrant Lives. With a focus on continuous value identification, creation, and delivery, Efftronics indigenously developed 50+ innovation solutions in the last three decades. Solutions include the Largest IoT network connecting 6 million+ signalling assets of Indian Railways spreading across 9000+ locations improving system availability through predictive maintenance, increasing safety by eliminating accidents, optimizing train operations, etc. Smart drinking water distribution system for cities ensuring 135 LPCD for every household, reducing unaccounted-for water (UFW) by 20%, ensuring timely and equitable distribution of water supply. AI-based Adaptive traffic management system for cities reducing travel times.

SESSION ACTIVITIES DURING EFFTRONICS VISIT:

Students visited Efftronics and learned about

- Data Loggers
- Different types of sensors and Actuator equipment
- Different types of multi-color display systems
- Battery monitoring unit & Signalling Systems
- IoT Security Systems
- PCB Design, Manufacturing, and Assembling

Efftronics staff explained chip design, PCB Design, and IoT. They also briefly explained the production system, Data loggers, customer data analysis sector, Batteries, storage, and R & D division. They have shown how to develop LEDs and different types of LEDs and their applications. They were explaining a brief about company products and how many live projects are going on and how they are satisfied with the customer. All over India there are being installed and maintaining dataloggers around 9000+ railways stations. Further, they explained what different types of sensors and IoT have been used for appropriate applications

They are mainly Six sections introduced and the manufacturing process is explained they are Prototype Testing of Data Logger for Indian Railway

LED Testing & Designing Section: in this section, they are explained various types of LEDs and their wavelengths, and high bright LED. Etc.

PCB Designing and Manufacturing:

They clearly explained about Types of PCBs

1. Single side
2. Double-side PCB
3. multi-layer

Clearly explained through live demonstration in the fabrication room all stages of the process from the Designing, verification, developing, Screen Printing, Automatic and semiautomatic components mounting, Manual mounting, Testing, and verification. Followed by Pre curing and Post curing and testing techniques, assembling, and Quality assessment including the final stage of the Device.

Photo Gallery of Visit



During Seminar Session



PCB Screen Printing



PCB Components Automatic Pick and Place Machine



PCB Manual Verification and soldering



PCB Final Curring and Verification and Testing



IoT Signalling Application



IoT Data Logger



Final Consolidation and Feedback Session

07.09.2022

Industrial Visit Permission Letter

From

Prof. M. Suman
HoD, ECE
KLEF (Deemed to be University)
Green Fields, Guntur, Andhra Pradesh

To

The Principal
College of Engineering
KLEF (Deemed to be University)
Green Fields, Guntur, Andhra Pradesh

Through: Proper Channel

Respected Sir,

Sub: Permission to visit the Efftronics Systems Pvt. Ltd. – Reg.

I would like to inform you that, we are planning to arrange the Industrial visit to our second year ECE students. In view of the above, we received the confirmation mail from the Efftronics Systems Pvt Ltd and they have given the Industrial visit allotment Schedule on 10-SEP-2022 between 14:00 to 17:00hrs. We believe that this industrial visit useful to our ECE students to acquire practical knowledge in Electronic System Design and the Internet of Things.

Details of the Industrial Visit Plan:

Company Name: Efftronics Systems Pvt Ltd

Address: Plot No.4, IT Park, Auto Nagar, Mangalagiri, Guntur District - 522503.

Date and Time: 10. 09. 2022 at 1.30 pm to 05.00pm

Students: ^{Third} ~~Second~~ year ECE, Section-1 (58 Members)

Faculties: Four Faculty Members (Three Male faculties and one Female Faculty)

As per the plan of visit our four faculty members also accompany, I request you to give permission to visit Efftronics Systems Pvt. Ltd. and provide the transport facility.

Thanking you,

Yours Sincerely,

Dr. M. SUMAN
Professor & Head
Department of ECE
KLEF

Green Fields, Vaddeswaram
Guntur Dist., A.P. PIN: 522 502

Dr. T.K. RAMA KRISHNA RAO
PRINCIPAL
College of Engineering
Koneru Lakshmaiah Education Foundation
(Deemed to be University)
Green fields, Guntur, Andhra Pradesh - 522 302

Fwd: PERMISSION LETTER FOR INDUSTRIAL VISIT-reg

Arunmetha S <sarunmetha@kluniversity.in>

Wed 07-09-2022 15:49

To: Office ECE <office_ECE@kluniversity.in>

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From: HRDCELL <hr@efftronics.com>

Sent: Friday, August 26, 2022 3:39:34 PM

To: Arunmetha S <sarunmetha@kluniversity.in>

Cc: Dr Santhosh C <csanthosh@kluniversity.in>; K Rajesh Babu <krajeshbabu@kluniversity.in>; Lakshman Pappula <lakshman.pappula@kluniversity.in>; Suman Maloji <suman.maloji@kluniversity.in>

Subject: Re: PERMISSION LETTER FOR INDUSTRIAL VISIT-reg

Dear Sir,

Greetings of the Day...!

As a part of extension of our co-operation to Academic Institutions and to ignite aspirations of students towards Research we have been organizing Industrial Visits as per your request.

As accomadating all the students (418) at a time may not possible, visit will be conducted with a **limit of 40-45 students.**

As per our Industrial visit allotment Schedule, we would like to give a **tentative date** for college visit on **10-SEP-2022** between **14:00 to 17:00hrs.**

Please revert us back for confirmation.

Regards,
Srupanika D,
HRD,
Efftronics Systems Pvt Ltd.
+91 8645-666777

From: Arunmetha S <sarunmetha@kluniversity.in>

Sent: Wednesday, August 10, 2022 4:55 PM

To: HRDCELL <hr@efftronics.com>

Cc: Dr Santhosh C <csanthosh@kluniversity.in>; K Rajesh Babu <krajeshbabu@kluniversity.in>; Lakshman Pappula <lakshman.pappula@kluniversity.in>; Suman Maloji <suman.maloji@kluniversity.in>

Subject: PERMISSION LETTER FOR INDUSTRIAL VISIT-reg

You don't often get email from sarunmetha@kluniversity.in. [Learn why this is important](#)

Dear Sir/Madam,

On behalf of KLEF, I serve as the Associate Professor in the Department of ECE. I wish to request permission to conduct an industrial visit to your company. KLEF is reputed for providing quality education

21.12.2022

From

Dr. S. Arunmetha
Associate Professor, ECE
K L E F (Deemed to be University)
Green Fields, Guntur, Andhra Pradesh

To

The Registrar
K L E F (Deemed to be University)
Green Fields, Guntur, Andhra Pradesh

Through: Proper Channel

Respected Sir,

Sub: Permission to visit the Industry and Transportation - request- Reg

I would like to inform you that, we are planning to arrange the Industrial visit for our third year ECE students. In view of the above, we received the confirmation mail from Efftronics Systems Pvt Ltd.

Details of the Industrial Visit Plan:

Company Name: Efftronics Systems Pvt Ltd

Address: Plot No.4, IT Park, Auto Nagar, Mangalagiri, Guntur District - 522503.

Date and Time: 23. 12. 2022 at 1.30 pm to 05.00 pm

Students: Third year ECE, (70 Members)

Faculties: Four Faculty Members (Three Male faculties and one Female Faculty)

As per the plan of visit our four faculty members also accompany us, I request you to provide permission to visit Efftronics Systems Pvt Ltd and provide the transport facilities.

Thanking you,

Yours Sincerely,

S. Arunmetha

Encl:

Permission Letter from Industry

Transport Requisition Form

OK
21/12
Dr. A. JAGADEESH
REGISTRAR (I/C)



K L University

(Koneru Lakshmaiah Education Foundation)

Deemed to be University, Estd. u/s 3 of UGC Act, 1956

Accredited by NAAC as 'A' Grade University ✦ Approved by AICTE ✦ ISO 9001-2008 Certified

Campus: Greenfields, Vaddeswaram - 522 502, Guntur District, Andhra Pradesh, INDIA.

Phones: +91-8645-246948, 246615 Fax: +91-8645-247249.

Admin Off: 29-36-38, Museum Road, Governorpet, Vijayawada - 520 002. Ph: +91-866-2577715, Fax: +91-866-2577717.

Transport Requisition

Date:

Indenting department ECE		Name of the person indenting Dr. S. Anumetha.		Employee ID No. 5616.	
Organization for which the vehicle is indented			Name(s) of the person(s) for whom vehicle is indented		
Contact no. of indenting person 9994831313.			Contact no. of user(s)		
Purpose (brief description) Industrial visit.					
Reporting place Electronics part Mangalgi.		Reporting date 23.12.2022.		Reporting time 2 PM.	
Expected releasing place KLEF		Expected releasing date 23.12.2022		Expected reporting time 5 PM 4.45	
Signature of the Indenter S. Anumetha.		Signature of Head of the Department [Signature] Professor & Head Department of ECE		Signature of the Registrar Dr. A. JAGADEESH REGISTRAR (I/C)	
Requisition No.		Requisition receipt date & time		Received above requisition	
Allotment of own vehicle		Allotment of hired vehicle			
Vehicle No.	Name of driver	Driver's contact no.	Vehicle No.	Name of driver	Driver's contact no.
Special instructions, if any			Signature of Transport In-Charge		

for Transport Department Use

Green Fields, Vaddeswaram
Guntur Dist., A.P. Pin: 522 502

Bus available 5/7
[Signature]
21/12/22

S.No.	Reg No	Name of the Student	On ward Time	Return Time	Signature
1	2000040263	RANAGANI YOJANA SNOHI - H1			<i>[Signature]</i>
2	2000040306	Akkapeddi Venkata Naga Nithin Datta			<i>[Signature]</i>
3	2000040179	VARI GAYATHRI			<i>[Signature]</i>
4	2000040164	YARRAGUNTLA DEEPIKA JYOTHI			<i>[Signature]</i>
5	2000040114	PONNURU SRI VARSHA			<i>[Signature]</i>
6	2000040130	SHAIK ALTHAF HUSSAIN			<i>[Signature]</i>
7	2000040066	KAMBHAMPATI HAVEELA			<i>[Signature]</i>
8	2000049020	CHINTAPALLI ARCHANA CHOWDARY - H			<i>[Signature]</i>
9	2000040106	PATNAIK MOHAN SANDEEP			<i>[Signature]</i>
10	2000040152	VANGA SAI TARUN REDDY			<i>[Signature]</i>
11	2000040148	TUMMALA HRUDAY			<i>[Signature]</i>
12	2000040031	DADANI POOJA			<i>[Signature]</i>
13	2000040311	KATTA RAMANJANEYULU			<i>[Signature]</i>
14	2000040145	KOLLURU TARAKA CHANDRA SRIKAR			<i>[Signature]</i>
15	2000040321	MIRIYALA ABHIRAM			<i>[Signature]</i>
16	2000049014	JEENEPALLI JWALA NARASIMHA			<i>[Signature]</i>
17	2000049047	ATLURI VASANTH SAI			<i>[Signature]</i>
18	2000040201	MUTYALA HORA SATYA MADHU BABU			<i>[Signature]</i>
19	2000049048	TAMMANA KESAVA SAI AMITH			<i>[Signature]</i>
20	2000040139	SUNDARAPU DHARMENDRA			<i>[Signature]</i>
21	2000040057	JONNADULA TEJA SREE VIJAY KUMAR			<i>[Signature]</i>
22	2000040080	KORUKONDABATTAR VARUN KRISHNA			<i>[Signature]</i>
23	2000040308	SINGAMSETTI NAGA MANIKANTA			<i>[Signature]</i>
24	2000040033	DHARANIDHAR KOMMERLA			<i>[Signature]</i>
25	2000040302	MEKALA VARUN			<i>[Signature]</i>
26	2000040185	VADDESWARAM SHALIN RAJU			<i>[Signature]</i>
27	2000040040	SATHVIK GANGARAJU			<i>[Signature]</i>
28	2000040315	Yenduri Siva Prasad			<i>[Signature]</i>
29	2000040259	SANAGALA KIRAN REDDY			<i>[Signature]</i>
30	2000040299	GORRELA DILEEP			<i>[Signature]</i>

Girls - 11 Hostel - 5

Boys - 38 Hostel - 3

31	2000040279	Sifa Clemence				<i>Sifa</i>
32	2000040264	KADALI DURGA SRI RAM				<i>Durga</i>
33	2000040285	sri sai durgesh prasad mucharla				<i>Sri Sai</i>
34	2000040280	MEKA VENKATA SAI BABU				<i>Sai Babu</i>
35	2000040123	GOLLAPALLI SAI GOUTHAM				<i>G. Saitan</i>
36	2000040251	VYSYARAJU JASWANTH RAJU				<i>Jaswanth</i>
37	2000040312	Dharnasi Rajesh				<i>Rajesh</i>
38	2000040008	MORAMPUDI ASRITHA				<i>Asritha</i>
39	2000040143	TAMMA MONIKA REDDY				<i>Monika</i>
40	2000040277	PRAGNESH RAM VADLAMUDI				<i>V. Pragnesh</i>
41	2000040206	SHAIK MUNNA				<i>Munna</i>
42	2000040009	KAMMUR ATAHAR				<i>Atahar</i>
43	2000040050	INAVOLU VISHNU SAKETH				<i>Vishnu</i>
44	2000040063	KAJJA JANARDHANA RAO				<i>K. Janardh</i>
45	2000040067	KANCHARLA VEERA VENKATA SATYA SANDEEP				<i>Sandeep</i>
46	2000040072	POLANKI KASYAP				<i>P. Kasyap</i>
47	2000040076	KONDEPATI ROHITH				<i>Rohith</i>
48	2000040095	MUCHINTALA JAGADEESH				<i>M. Jagadeesh</i>
49	2000040100	GATTUPALLI NAGA VENKATA SURYA				<i>G. Surya</i>
50	2000040109	PARISHA SAI CHARAN TEJA				<i>P. Saicharan</i>
51	2000040112	PEDDIREDDY SRIKAR SWAMI NAIDU				<i>Srikar</i>
52	2000040142	T K DEVENDRA KUMAR				<i>T. Devendra</i>
53	2000040144	TANDRA SHEETHAL				<i>Sheethal</i>
54	2000040167	Cherukupalli Lakshmi Sai Ganesh Kumar				<i>Lakshmi</i>
55	2000040205	Janam Sravan Kumar				<i>Sravan</i>
56	2000040296	MEDURI SRI SRUTHI = H				<i>Sruthi</i>
57	2000040316	ATKURI VENKATA SATYADEV				<i>V. Satyadev</i>

58 2000040141 Padma Sujam

59 200040001 - Padmarath

60 200040169 - G. Pavarti Teja

P. Sujam
Padma
G. Pavarti