



DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING-M.E.(PSPE)

1.3.4. Percentage of students undertaking field projects/Internships (2022-2023)

Index Page

| Sl.No | Roll Number | Name of Student | Field Projects/internships | Page No |
|-------|--------------|---------------------------|----------------------------|---------|
| 1. | 160122766001 | NARASIMHULU | Internship | 02 |
| 2. | 160122766002 | BEEMARI PRANESH | Internship | 03 |
| 3. | 160122766003 | AZKA IHTESHAM UDDIN AHMED | Internship | 04 |
| 4. | 160122766004 | MARAPALLY SAI CHARAN | Internship | 05 |
| 5. | 160122766005 | SUNKARI SRILATHA | Internship | 06 |
| 6. | 160122766006 | BOLLE SHIRISHA | Internship | 07 |
| 7. | 160122766007 | DEVSOOTH SRINIVAS | Internship | 08 |
| 8. | 160122766008 | SANGEETHA BACHALA | Internship | 09 |
| 9. | 160122766001 | NARASIMHULU | Industrial Visit | 10-22 |
| 10. | 160122766002 | BEEMARI PRANESH | Industrial Visit | 10-22 |
| 11. | 160122766003 | AZKA IHTESHAM UDDIN AHMED | Industrial Visit | 10-22 |
| 12. | 160122766004 | MARAPALLY SAI CHARAN | Industrial Visit | 10-22 |
| 13. | 160122766005 | SUNKARI SRILATHA | Industrial Visit | 10-22 |
| 14. | 160122766006 | BOLLE SHIRISHA | Industrial Visit | 10-22 |
| 15. | 160122766007 | DEVSOOTH SRINIVAS | Industrial Visit | 10-22 |
| 16. | 160122766008 | SANGEETHA BACHALA | Industrial Visit | 10-22 |
| 17. | 160121766001 | KHAJA IZHARUDDIN | Project | 23 |
| 18. | 160121766003 | P.PRADEEP KIRAN | Project | 24 |
| 19. | 160121766004 | M.VINAY KUMAR | Project | 25 |
| 20. | 160121766005 | H.PRAVEEN | Project | 26 |
| 21. | 160121766006 | K.VINOD KUMAR | Project | 27 |

TO WHOMSOEVER IT MAY CONCERN

INTERNSHIP

This is to certify that **Mr. NARASIMHULU** has done his internship with **BizAcuity solutions Pvt.Ltd.** from **01-02-2023 to 07-02-2023**. He worked on Software developer.

During his internship, he has undergone the training on SQL, Tableau and Excel. During his tenure with us, he was able to handle major responsibilities and was found to be hard working and dedicate individual who exhibited a quest for learning and flair for solving problems.

We at **BizAcuity Pvt.Ltd** , are satisfied with his work and wish him all the very best for all his future endeavours.

Sincerely,



Prachi Kulkarni
HR Manager





Certificate of Internship

This is Certify that

BEMARI PRANESH

from

Chaitanya Bharathi Institute of Technology

Has successfully completed a 1 week swecha internship program during **01-02-2023 to 07-02-2023** on **Software developer** with Swecha.

A handwritten signature in blue ink, appearing to read 'Swelma'.

SWELMA



Certificate of Internship

This is Certify that

AZKA IHTESHAM UDDIN AHMED

from

Chaitanya Bharathi Institute of Technology

Has successfully completed a 1 week swecha internship program during **01-02-2023 to 07-02-2023** on **Web development and data science** with Swecha.

A handwritten signature in black ink, appearing to read 'Swelma'.

SWELMA

TO WHOMSOEVER IT MAY CONCERN

INTERNSHIP

This is to certify that **Mr. MARAPALLY SAI CHARAN** has done his internship with **BizAcuity solutions Pvt.Ltd.** from **01-02-2023 to 07-02-2023**. He worked on Programming with C and C++.

During her internship, he has undergone the training on C, C++, SQL and Excel. During his tenure with us, he was able to handle major responsibilities and was found to be hard working and dedicate individual who exhibited a quest for learning and flair for solving problems.

We at **BizAcuity Pvt.Ltd** , are satisfied with his work and wish him all the very best for all his future endeavours.

Sincerely,



Prachi Kulkarni
HR Manager





Certificate of Internship

This is Certify that

SUNKARI SRILATHA

from

Chaitanya Bharathi Institute of Technology

Has sucessfully completed a 1 week swecha internship program during **01-02-2023 to 07-02-2023** on **Web development and data science** with Swecha.

A handwritten signature in black ink, appearing to read 'Swelma'.

SWELMA



Certificate of Internship

Congratulations, **BOLLE SHIRISHA**

Programming with C and C++

Course completed on 01-02-2023 to 07-02-2023, 1 week.

By completing this course, you have sharpened your skills & made yourself an asset for industry needs



Founder & CEO

SkillDzire Technologies Pvt. Ltd, Bizness Square 16,HITEC City, Hyderabad, Telangana | 500081

78935 57108

info@skilldzire.com

www.skilldzire.com

Ref: Solara/Intern/2023

Date:10-02-2023

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Mr. DEVSOTH SRINIVAS** has done his internship with SOLARA HOME, Hyderabad from **01-02-2023 to 07-02-2023**. He worked on **customer support and Logistics**.

During his internship, he was responsible for confirming orders with customers shipment, scheduling and ensuring safe delivery product. He is the key resource to list down areas of operation and identification of logistic department.

For Solara Home


ARUNA MODYA
DIRECTOR-SOLARA
arunfcbu@sol@gmail.com
+91-9014411770
www.solara.in



Certificate of Internship

This is Certify that

SANGEETHA BACHALA

from

Chaitanya Bharathi Institute of Technology

Has successfully completed a 1 week swecha internship program during **01-02-2023 to 07-02-2023** on **Web development and data science** with Swecha.

A handwritten signature in black ink, appearing to read 'Swelma'.

SWELMA



**CHAITANYA BHARATHI
INSTITUTE OF TECHNOLOGY (A)**

Kokapet(Village), Gandipet, Hyderabad, Telangana-500075. www.cbit.ac.in



COMMITTED TO
RESEARCH,
INNOVATION AND
EDUCATION

44
years

INDUSTRIAL VISIT REPORT

Nagarjuna Sagar Hydro Electric Station, Nalgonda.

DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

ORGANIZING



INDUSTRIAL VISIT



To

NAGARJUNA SAGAR HYDRO ELECTRIC STATION

NALGONDA

**ON
17TH MARCH 2023**

**FOR
M.E (PS & PE)**

FACULTY INCHARGE : HEMESHWAR CHARY, SANTOSH KUMAR



A report on industrial visit organised by Department of Electrical And Electronics Engineering, Chaitanya Bharathi Institute of Technology (A) on 17.03.2023 for the students of Electrical and Electronics Engineering (VI-Sem) in order to get the practical knowledge about electric power generation using hydel energy.





DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING

INDUSTRIAL VISIT

NAGARJUNA SAGAR HYDRO ELECTRIC STATION

SCHEDULE

| S.no | Date | Time | Schedule |
|------|-----------------------|--------------|------------------------------|
| 1. | 17.03.2023 (Day-1) | 9 am | Starts from CBIT, Hyderabad. |
| | | 1 pm | Reach Nagarjuna Sagar |
| | | 2 pm to 5 pm | Power Plant Visit |
| 2. | 18.03.2023 (Day-2) | 9 am to 1 pm | Nagarjuna Sagar Dam |
| | | 3 pm to 4 pm | Buddhavanam Park |
| | | 4 pm | Starts from Nagarjuna Sagar |
| | | 7 pm | Reach CBIT, Hyderabad. |

Faculty In charges

P. Hemeshwar Chary
Assistant Professor, EEE Dept.

Head ..
Dept. of EEE

N. Santosh Kumar
Assistant Professor, EEE Dept.

DETAILS OF JOURNEY

EEE Dept. CBIT (A) has organised an industrial visit on 17 -March-2023 to Nagarjuna sagar located in Nalgonda district for the Electrical and Electronics Engineering students.

The visit was arranged by HoD of EEE Dept. Prof. M. Bala Subba Reddy.

Sri P. Hemeshwar Chary & Sri N. Santosh Kumar were the faculty In-charges for the industrial visit.

We started travelling from the college campus at 10:30 am via travel bus. (Sri N. Santosh Kumar, Sri P. Hemeshwar Chary,) accompanied the students during the visit.

Engg. C. V. Siva Kumar, Assistant Engineer, Nagarjuna sagar Hydro Electric Station, guided us throughout the power plant visit.

POWER PLANT PROFILE

World's largest masonry dam protected with 26 gates measuring 124.663m in height, Nagarjuna sagar Dam located in Nalgonda District is built across River Krishna.

The dam has a storage capacity of nearly 11,472 million cubic meters with an irrigation capacity for 9.81 lac acres of land. The dam measure 150m tall and 16 kms in length while also being a major tourist attraction.

In fact, it is among the first irrigation projects started by Indian Government as an element of Green Revolution.

Today, apart from offering not only irrigation facility, it is also a source of hydro-electricity.

The dam attracts a huge number of tourists owing to its great magnificence as well as the cover of dense green surrounding it offering an absolutely captivating view.



TECHNICAL DATA

Catchment Area: 214,185 km² (82,697 sq. mi)

Full Reservoir Level (FRL): 179.83 metres (590 ft)

Water spread area at FRL: 285 km²

Gross storage capacity at FRL: 312 TMC

MDDL of river sluices: 137.3 metres (450 ft)

MASONRY DAM

Spillway of dam: 471 m

Non-over flow dam: 979 m

Length of Masonry dam: 1450 m

Maximum height: 125 m

EARTH DAM

Total Length of Earth dam: 3414 m

Maximum height: 128 m

POWER GENERATION

Power Units: 1 No. conventional (110 MW capacity), 7 no's Reversible (100 MW capacity)

CANAL POWER HOUSE

Right side: 3 units 30 MW (each)

Left side: 2 units 30 MW (each)

POWER GENERATION

The hydroelectric plant has a power generation capacity of 815.6 MW with 8 units (1x110 MW+7x100.8 MW).

The first unit was commissioned on 7 March 1978 and the 8th unit on 24 December 1985.

The right canal plant has a power generation capacity of 90 MW with 3 units of 30 MW each.

The left canal plant has a power generation capacity of 60 MW with 2 units of 30 MW each. The tail pond is under advanced stage of construction to put to use the pumped storage features of 7 x 100.8 MW units and it will be used for irrigation.



Nagarjuna sagar dam power generation

Many times, it happens that power generation from the 150 MW canal based units is not optimised when the Nagarjuna sagar reservoir is overflowing on its spillway and less water is required for irrigation from the canals during the monsoon floods.

Power generation from the canal based hydro units can be optimised by running these units during the flooding period by releasing the water fully into the canals. The unwanted canal water can be released into the natural stream when it is crossing the major stream. Thus run off power can be generated from the water going down unutilised into the river by the canal based power units also.

The water level in the Nagarjuna sagar reservoir shall be maintained above the minimum level required for these units in most of the time by releasing water from the upstream Srisaïlam reservoir to optimise the power generation from the canal based units during dry season.

GROUP OBSERVATION

This Industrial visit was very helpful in acquiring practical knowledge about the Hydro power generation, use of power transformers, AC motors, Turbine in generation.

We have seen current transformers, bus-bar system, pen stock, turbine, phases visually.



Vertical Francis Turbine



Details of Generator and Turbine used in Nagarjuna sagar



Bus bar system



Bus bar system



Pumped Storage Plant Model

Pumped storage hydropower (PSH) is a type of hydroelectric energy storage. It is a configuration of two water reservoirs at different elevations that can generate power as water moves down from one to the other (discharge), passing through a turbine. The system also requires power as it pumps water back into the upper reservoir (recharge). PSH acts similarly to a giant battery, because it can store power and then release it when needed.



Students Visited the Power plant

| S.no | Roll No | Name of the Student | Signature |
|------|-----------------|---------------------------|-----------|
| 1. | 1601-22-766-001 | NARASIMHULU | |
| 2. | 1601-22-766-002 | BEEMARI PRANESH | |
| 3. | 1601-22-766-003 | AZKA IHTESHAM UDDIN AHMED | |
| 4. | 1601-22-766-004 | MARAPALLY SAI CHARAN | |
| 5. | 1601-22-766-005 | SUNKARI SRILATHA | |
| 6. | 1601-22-766-006 | BOLLE SHIRISHA | |
| 7. | 1601-22-766-007 | DEVSOOTH SRINIVAS | |
| 8. | 1601-22-766-008 | SANGEETHA BACHALA | |



CONCLUSION

We are thankful for the Management, Principal-CBIT (A), Professor Balasubba Reddy-HoD and faculty members EEE Dept. for making the Industrial visit successful.

We hope to get more chances further to have such an informative and wonderful experiences of visiting different industries.

P. Hemeshwar Chary,
Assistant Professor,
EEE Dept.

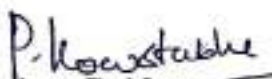
N. Santosh Kumar,
Assistant Professor,
EEE Dept.


CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
(Affiliated to Osmania University)
GANDIPET, HYDERABAD – 500 075



CERTIFICATE

This is to certify that the disseration work entitled “**Design and Analysis of Resonant Converter for EV applications**” was submitted to CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY, in partial fulfilment of the requirements for the award of **Master of Engineering in Power Systems and Power Electronics**, during the academic year 2021-2023, is a record of original work done by **KHAJA IZHARUDDIN** (Roll no.160121766001) during the period of study in the department of EEE, CBIT, HYDERABAD, under our supervision and guidance.


Project Guide
Dr. P.KOWSTUBHA
Assoc. Professor,
Dept. of EEE,
CBIT, Hyderabad.


Head of the Department
Dr. BALASUBBAREDDY
Professor and HOD
Dept. of EEE,
CBIT, Hyderabad.

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
(Affiliated to Osmania University)
GANDIPET, HYDERABAD – 500 075



CERTIFICATE

This is to certify that the dissertation work entitled **“PERFORMANCE COMPARISON OF THREE PHASE INDUCTION MOTOR USING SYMMETRICAL AND ASYMMETRICAL SEVEN LEVEL INVERTERS”** is a bonafide work done and submitted by **P. PRADEEP KIRAN** bearing hall ticket no. **(160121766003)**, in partial fulfillment of the academic requirement for the award of **Master of Engineering** in EEE with **Power Systems & Power Electronics** as specialization to the Department of Electrical and Electronics Engineering **C.B.I.T, Hyderabad** during the period **2021 – 2023**.

T. Murali Krishna

Project Guide

Dr.T. MURALI KRISHNA

Assoc. Professor, Dept. of EEE,
CBIT, Hyderabad.

M. Balasubba Reddy
Head of the Department

Dr. M. BALASUBBA REDDY

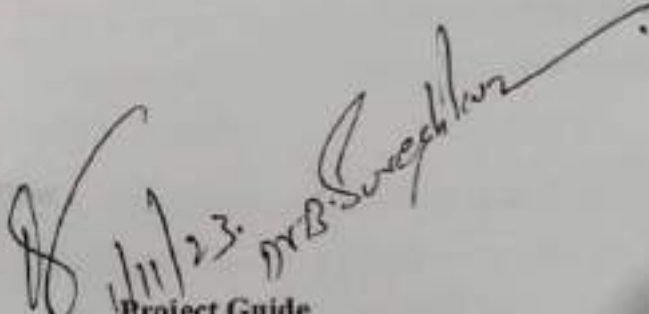
Professor, Dept. of EEE,
CBIT, Hyderabad.

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)
DEPARTMENT OF ELECTRICAL AND ELECTRONICS ENGINEERING
(Affiliated to Osmania University)
GANDIPET, HYDERABAD – 500 075



CERTIFICATE

This is to certify that the dissertation work entitled “**MODELLING AND CONTROL OF DOUBLY FED INDUCTION GENERATOR FOR WIND POWER**” is a bonafide work done and submitted by **M. VINAY KUMAR** bearing hall ticket no. (160121766004), in partial fulfillment of the academic requirement for the award of **Master of Engineering in EEE with Power Systems & Power Electronics** as specialization to the Department of Electrical and Electronics Engineering C.B.I.T, Hyderabad during the period 2021 – 2023.


1/11/23
Project Guide

Dr.B. SURESH KUMAR

Assoc. Professor, Dept. of EEE,

CBIT, Hyderabad.


Head of the Department

Dr. M. BALASUBBA REDDY

Professor, Dept. of EEE,

CBIT, Hyderabad.

Dr.B. Suresh Kumar M.Tech, Ph.D.
Asso. Professor
Dept. of Electrical & Electronics Engg.
Chaitanya Bharathi Institute of Technology
Gandipet, Hyderabad-75.

ii


HEAD
Dept. of EEE, CBIT (A)
Gandipet, Hyderabad-75

**CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY,
(AUTONOMOUS)**

Department of Electrical and Electronics Engineering

CERTIFICATE



This is to certify that the dissertation work entitled **"DESIGN AND DEVELOPMENT OF AXIAL FLUX COMPACT PM WIND GENERATOR"** is a bonafide work done and submitted by **H.PRAVEEN** bearing hall ticket no.(160121766005), in partial Fulfillment of the academic requirement for the award of **Master of Engineering** in EEE with **Power Systems & Power Electronics** as specialization to the Department of Electrical and Electronics Engineering **C.B.I.T, Hyderabad** during the period **2022 -2023**.

U. Choudhury

U. Choudhury

PROJECT GUIDE

Dr. U.K. CHOUDHURY

Professor, Dept of EEE

Advisor- Innovation & Incubation

CBIT Hyderabad

M. Balasubba Reddy

HEAD OF THE DEPT

Dr.M. BALASUBBA REDDY

Professor & HOD, Dept of EEE

CBIT Hyderabad

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

**DEPARTMENT OF ELECTRICAL AND ELECTRONICS
ENGINEERING**

(Affiliated to Osmania University)

GANDIPET, HYDERABAD – 500 075



CERTIFICATE

This is to certify that the dissertation work entitled **"CONTROLLING OF SOLAR BASED ELECTRIC VEHICLE CHARGING STATION THROUGH INTELLIGENT CONTROLLER FOR V2G AND G2V MODES"** is a bonafide work done and submitted by **K.VINOD KUMAR** bearing hall ticket no. **(160121766006)**, in partial fulfillment of the academic requirement for the award of **Master of Engineering** in **EEE with Power Systems & Power Electronics** as specialization to the Department of Electrical and Electronics Engineering **C.B.I.T, Hyderabad** during the period **2021 – 2023**.

A handwritten signature in blue ink, appearing to read 'Dr. Balasubba Reddy', is written over a horizontal line.

Head of the department & Project guide

Dr. BALASUBBA REDDY

Professor, Dept of EEE,

CBIT,

Hyderabad.