1.2.2 - Number of Add on /Certificate programs offered during the year.

1.2.2.1 - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

**HEI Input: 15**

## Table of Contents

**Summary of Addon Course / Certification Course / Value added Courses in Academic Year 2022-23** ..... 2

Addon Course on Application and Virtualization of Data Structure by Programming World Pvt. Ltd. ..... 5

Addon Course on Blockchain and its Applications ..... 9

Value added Training on Solid Works - Indo German Tool Room, Indore ..... 15

Addon Course on Advance Java, Module – 1 by Programming World Pvt. Ltd. ..... 22

Value added Training on CREO by Indo German Tool Room, Indore ..... 27

Addon Course on Data Analytics in R by IIMR, Indore ..... 35

Addon Course on AI Based Product Development (Basis) by Codenscious Technologies Pvt. Ltd. ..... 42

Addon Course on AI Based Product Development (Advance) by Codenscious Technologies Pvt. Ltd. ..... 50

Addon Course on SQL using Data Science by Turning Points ..... 55

Certificate Course on Applications of data science for chemical engineer through SPSS ..... 60

Certificate Course on Prestressed Concrete Structures ..... 76

Addon Course on Advance Java, Module -2 by Programming World Pvt. Ltd ..... 86

Certification Course on Drone Development by Om Drone Developer Pvt. Ltd. ..... 95

Certification Course on Advance Solid Works by Indo German Tool Room, Indore ..... 101

Certification Course on Design and Development of Drone Prototype by ORC Electronics India Private Limited ..... 111

Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## Summary of Addon Course / Certification Course / Value added Courses in Academic Year 2022-23

| S. No. | Date | Total hours | Workshops / Training | Organized by | Association | Participation / Total Enrolled | Class / Year | Resource person with contact detail |
|---|---|---|---|---|---|---|---|---|
| 1 | 18-07-2022 to 25-07-2022 | 35 | Addon Course on Application and Virtualization of Data Structure | AIML | Programming World Pvt. Ltd. | 62 | AIML II Year | Mr.Pankaj Wadhwani, Programming World Pvt. Ltd. |
| 2 | 25-07-2022 to 04-08-2022 | 40 | Addon Course on Blockchain and its Applications | CSE | - | 71 | CS/IT III Year | Mr.Umesh Sahu |
| 3 | 24-08-2022 to 06-09-2022 | 40 | Value added Training on Solid Works | ME | Indo German Tool Room, Indore | 43 | ME III Year | Mr. Prakhar Joshi, IGTR, Indore |
| 4 | 12-10-2022 to 09-11-2022 | 45 | Addon Course on Advance Java, Module - 1 | CSE | Programming World Pvt. Ltd. | 278 | CS/IT III Year | Mr.Pankaj Wadhwani, Programming World Pvt. Ltd. |
| 5 | 21-11-2022 to 26-11-2022 | 40 | Value added Training on CREO | ME | Indo German Tool Room, Indore | 45 | ME II Year | Mr. Prakhar Joshi, IGTR, Indore |
| 6 | 12-12-2022 to 23-12-2022 | 40 | Addon Course on Data Analytics in R | ME | IIMR, Indore | 85 | ME IV Year | Dr.Reshu Agrawal, IIMR, Indore |

IQAC INDORE

Indore Institute of Science & Technology INDORE

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 7 | 16-12-2022 to 22-12-2022 | 42 | Addon Course on AI Based Product Development (Basis) | IT | Codenscious Technologies Pvt. Ltd. | 255 | CS/IT/EC/AIML II Year | Mr. Shivang Trivedi, Codenscious Technologies Pvt. Ltd., |
| 8 | 02-01-2023 to 10-01-2023 | 45 | Addon Course on AI Based Product Development (Advance) | AIML | Codenscious Technologies Pvt. Ltd. | 167 | CS/IT III Year | Mr. Shivang Trivedi, Codenscious Technologies Pvt. Ltd., |
| 9 | 02-01-2023 to 10-01-2023 | 35 | Addon Course on SQL using Data Science | IT | Turning Point | 218 | CS/IT/EC IV Year | Mr.Ankush Saklecha, Turning point |
| 10 | 02-01-2023 to 12-01-2023 | 30 | Certificate Course on Applications of data science for chemical engineer through SPSS | CM | - | 50 | CM IV Year | Ms Palak Shah |
| 11 | 03-02-2023 to 11-02-2023 | 45 | Certificate Course on Prestressed Concrete Structures | CE | - | 22 | CE II Year | Ms. Poonam Bagora |
| 12 | 20-02-2023 to 28-03-2023 | 45 | Addon Course on Advance Java, Module -2 | IT | Programming World Pvt. Ltd. | 280 | CS/IT III Year | Mr.Pankaj Wadhwani, Programming World Pvt. Ltd. |
| 13 | 13-03-2023 to 17-03-2023 | 30 | Certification Course on Drone Development | ECC | Om Drone Developer Pvt. Ltd. | 80 | EC II/III/IV Year | Mr Abhay Singh Lodhi, Om Drone |

IQAC INDORE

Indore Institute of Science & Technology INDORE

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Developer Pvt. Ltd. |
| 14 | 15-05-2023 to 19-05-2023 | 30 | Certification Course on Advance Solid Works | ME | Indo German Tool Room, Indore | 31 | ME II Year | Mr. Prakhar Joshi, IGTR, Indore |
| 15 | 15-05-2023 to 23-05-2023 | 30 | Certification Course on Design and Development of Drone Prototype | ECE | ORC Electronics India Private Limited | 57 | EC I and II Year | Mr. Abhinav Singh Thakur, ORC Electronics India Private Limited |

**Addon Course on Application and Virtualization of Data Structure by Programming World Pvt. Ltd.**

**Indore Institute of Science and Technology**

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date: - 4/07/2022

## Approval Letter

To,
The Principal,

IIST, Indore

Reference: Requesting approval for conducting Training Application and Visualization of Data Structure.

Respected Sir,

With reference to the above, the Department of AIML is organizing training on "Application and Visualization of Data Structure". From 07/07/2022 by Mr. Pankaj Wadhwani.

Thanks

Coordinator

Mr.Jitendra Kulaste

HOD

HOD AIML

PRINCIPAL

**Indore Institute of Science and Technology**

**Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal**

**Department of AIML**

| | | |
|---|---|---|
| *Title* | : | "Application and Visualization of Data Structure". |
| *Date of Event* | : | 18/07/2022 |
| *Speaker Expert* | : | Mr. Pankaj Wadhwani |

**Summary:**

We have total number of 62 students and all of the got benefitted with this one week training.
Feedback: 1. This Work is really good and very much useful to develop and teach data Structure and other technologies.

2. We are able to Share knowledge among ourselves.
3. We need this type of real time training.

Eminent resource persons Mr. Pankaj Wadhwani sir from real time application Development Company from Indore.
We received good feedback and response for conducting this training in AIML.

**Coordinator**
**Mr.Jitendra Kulaste**

HOD AIML

IQAC

INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY, INDORE

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Training: - Application Visualization of Data Structure and

COURSE OBJECTIVES:

1 To impart the basic concepts of data structures and algorithms

2 To understand concepts about searching and sorting techniques

3 To Understand basic concepts about stacks, queues, lists, trees and graphs

4 To understanding about writing algorithms and step by step approach in solving problems with the Help of fundamental data structures

COURSE OUTCOMES:

1 Ability to analyze algorithms and algorithm correctness.

2 Ability to summarize searching and sorting techniques

3 Ability to describe stack, queue and linked list operation.

4 Ability to have knowledge of tree and graphs concepts.

IQAC

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY, INDORE
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## Contents: - Application and Visualization of Data Structure

In this training, you will learn about the most popular topics corresponding to data structures and algorithms through live animation. The data structure is the key component of Computer Science and is used in the areas of artificial intelligence, operating systems, graphics, etc. This course aims to turn complexity into simplicity via illustrations and live animation. Visualization of data structures is provided for the most popular topics, such as queue, stack, linked list, recursion, and recursive function, graphs, trees, heap data structure, sorting algorithms, searching algorithms, hash function, and hash table. This course is provided for anyone who is interested in data structure and algorithms. All sorting and searching algorithms are covered by the implementation. The main programming language is based on Python. However, very basic knowledge about programming skills is required, and this knowledge is only required for sorting and searching algorithms in which they are discussed with Python programming language. All lectures are discussed from scratch, and don't be afraid if you think your knowledge is not enough for this course. In fact, both implementation and illustrations are discussed in a simple manner. I hope you enjoy this course.

The most popular topics that are covered are:

1. **Arrays**
2. **Queue**
3. **Stack**
4. **Linked List**
5. **Recursion**
6. **Graph Theory**
7. **Spanning Trees**
8. **Minimum Spanning Trees (Prim's and Kruskal's)**
9. **Graph Traversal (BFS and DFS)**
10. **Sorting Algorithms**
11. **Searching Algorithms**
12. **Heap Data Structure**
13. **Introduction to Trees**
14. **Binary Search Trees (BST)**
15. **Tree Traversal (Preorder, Inorder, Postorder)**
16. **The hash function and Hash Table**

## Addon Course on Blockchain and its Applications

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### Event Report

Academic Year: 2022-2023 Session: July Dec 2022

Name of Event: Training

Date of Event: 25 July 2022 Topic: Blockchain and its implementation

Organizing Dept.: Computer Science and Engineering

Event Coordinator Mr. Umesh kumar Sahu

Name of Expert/Guest: Mr. Umesh kumar Sahu

Institute/Company: IIST INDORE

Designation: Asst. Professor

Department: Computer Science & Engineering

Address: IIST INDORE

**Details of Participants:**

| No. of Institutes Participated | No. of Students Participated | | No. of Faculties Participated | | Department | No. of Industry Representative | Remark if any |
|---|---|---|---|---|---|---|---|
| | IIST | Other | IIST | Other | CSE/IT/EC/ME/CM/ESH | | |
| 1 | 71 | | | | CSE/IT | 0 | Nil |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary of events. (Outcome)
4. Certificate / Letter (if printed by Institute or Organizing Partner)/Attendance/feedback
5. Notice to students and faculty (Notice board notice copy, WhatsApp/ Mail information copy) :
6. Inside / Outside Resource person detail
7. List of Participate and Day wise attendance

HOD

IQAC

Principal

IQAC

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

DATE: 20/07/2022

## Approval Letter

The Department of Computer Science & wants to organize a training on Blockchain and its implementation from 25th July 2022 for CSE and IT third year students.

Kindly approve for organizing the SIG for all the interested Students.

Coordinator

Mr.Umesh Kumar Sahu

HOD

PRINCIPAL

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

DATE: 20/07/2022

# Notice

This is to inform you that the Department of Computer Science and Engineering is going to organize a Training on Blockchain and its implementation for CSE and IT third year students from 25th July 2022.

All the third students can participate.

HOD COMPUTER SCIENCE
DEPARTMENT OF COMPUTER SCIENCE
IIST
INDORE

IQAC
INDORE

IQAC
INDORE

Indore Institute of Science & Technology
INDORE

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### Department of Computer Science and Engineering

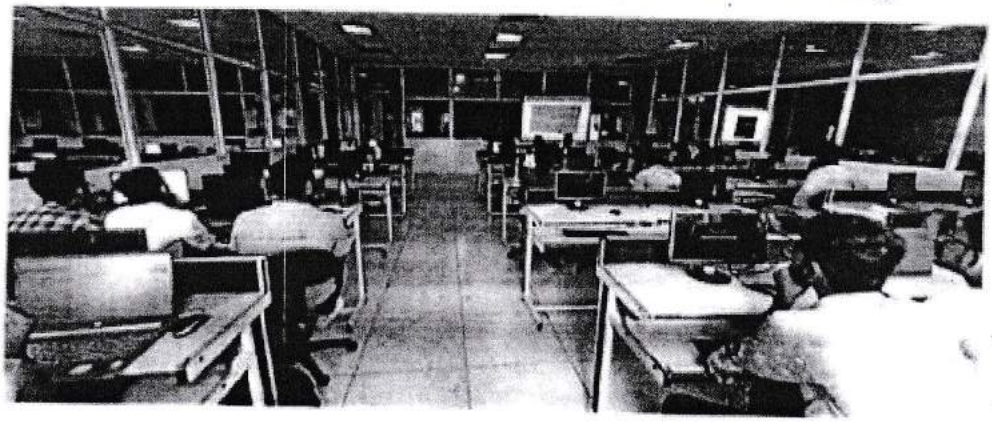
### Summary/Report for Expert Lecture on "Blockchain and its Implementation"

| | | |
|---|---|---|
| *Title* | : | Blockchain and its Implementation |
| *Date of Event* | : | 25 July 2022 |
| *Expert* | : | Mr. Umesh Kumar Sahu |
| *Coordinator* | : | Mr. Umesh Kumar Sahu |

**Summary:**

In the blockchain training covered blockchain introduction, blockchain type, blockchain application, Cryptography, hashing, solidity programming for smart contract, establishment transaction using metamask and Ganache, project demonstration of blockchain.

These Training student learn new technology with hands on practice of latest technology



Indore Institute of Science and Technology IQAC INDORE

DEPARTMENT COMPUTER SCIENCE IIST

Indore Institute of Science & Technology INDORE

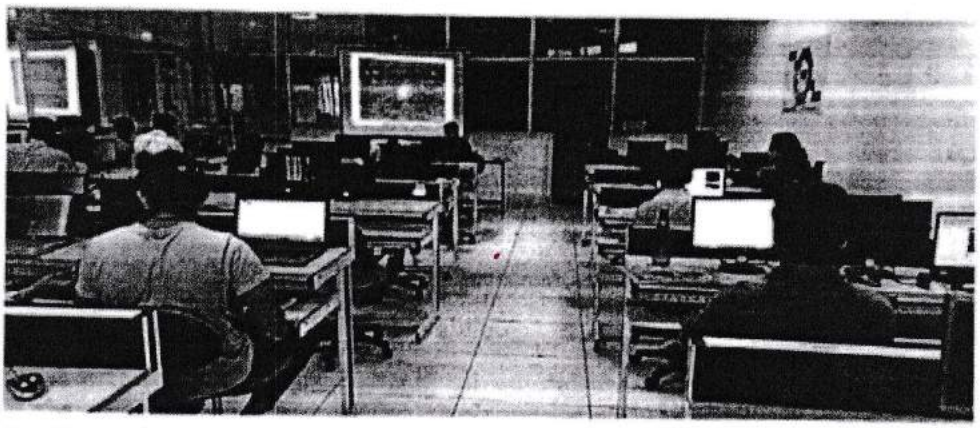
## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### Department of Computer Science and Engineering

### Summary/Report for Expert Lecture on "Blockchain and its Implementation"

His training is intended to provide opportunities for, researchers and students to upgrade their knowledge in the area of Blockchain Technologies.



Considering the growing importance of Blockchain Technologies and its potential in different sectors, this six day training is planned and sessions would be delivered by experts from academia and industry

# Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## "Blockchain and its implementation"

## Objectives and Course Outcomes

### Course Description:

A blockchain is "**a distributed database that maintains a continuously growing list of ordered records, called blocks.**" These blocks "are linked using cryptography. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. **Course Objectives:**

- The objective of this webinar is to make it more understandable to the students, faculties and research scholars in the field of sentiment analysis using machine learning and deep learning approaches.

### Course Outcomes:

On completion of this course, Students should be able to:

- Learn and understand the concepts of sentiment analysis.
- Learn different machine learning and deep learning approaches for sentiment analysis and also will learn to use different python packages.

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**

## Value added Training on Solid Works - Indo German Tool Room, Indore

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### APPROVAL LETTER

Date: 16/08/2022

To,

The Principal,
Indore Institute of Science and Technology,
Indore.

Subject: Permission for: **"2 Weeks Training on Solid Works"**

Respected sir,

We would like to conduct a Training on Solid Works from 24/08/2022 to 06/09/2022. There will be 43 Students from third year Mechanical Engineering. The students will be going to IGTR Indore. This Training is aimed to enhance their knowledge and learn about the latest technology used. We need Transport Facility for the same too.

Kindly permit us for the same.

Thanking You.

Yours sincerely
Mr. Vipin Singh
Assistant Professor
Mechanical Engineering Department
IIST Indore

HOD

Principal



IQAC INDORE

Indore Institute of Science & Technology INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## ACTIVITY REPORT

Academic Year -2022-23 Session: **July Dec 2022**
Name of Event: **Training**
Date of Event: 24/08/2022 to 06/09/2022 Topic: **"2 Weeks Training on Solid Works"**
Organizing Dept.: **ME** Event Coordinator: Mr . Vipin Patel

---

Name of Partner / co-organizer (If Industry is involved):IGTR, INDORE
Address: 281/B-302a, Sector 'e', Sanwer Road, Indore, Madhya Pradesh 452003
Contact No.: **07312484423** Email Id: Hr@IGTR.in
Name of Industry Representative: Mr. Prakhar Joshi
Contact No.: Email Id:

---

Name of Expert/Guest: Institute / Company: IIST , Indore
Designation: Department:
Address:,
Contact No.: Email Id:
Details of Participants:

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 43 | ME | | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD (ME)

Principal



Indore Institute of Science & Technology * INDORE *

Indore Institute of Science & Technology * INDORE *

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


| Course Content | |
|---|---|
| Date | Topics |
| 24/08/2022 | SolidWorks Basics and the User Interface |
| 25/08/2022 | SolidWorks Basics and the User Interface |
| 26/08/2022 | SolidWorks Basics and the User Interface |
| 27/08/2022 | Introduction to Sketching |
| 29/08/2022 | Introduction to Sketching |
| 30/08/2022 | Introduction to Sketching |
| 31/08/2022 | Basic Part Modeling |
| 01/09/2022 | Basic Part Modeling |
| 02/09/2022 | Basic Part Modeling |
| 03/09/2022 | Symmetry and Draft |
| 05/09/2022 | Symmetry and Draft |
| 06/09/2022 | Symmetry and Draft |



Indore Institute of Science and Technology IQAC Indore

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## RESOURCE PERSON PROFILE

Mr. Prakhar Joshi

**Mr. Prakhar Joshi** is presently working as Mechanical Engineer at IGTR Indore. He is a Mechanical Engineering graduated from Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal, Madhya Pradesh. He has an experience over 5 years is the field of Modeling & Simulation. His expertise is in CAD software as well as in ANSYS. He is also a trainer in the field of CAD. He has delivered more than 15 seminars.

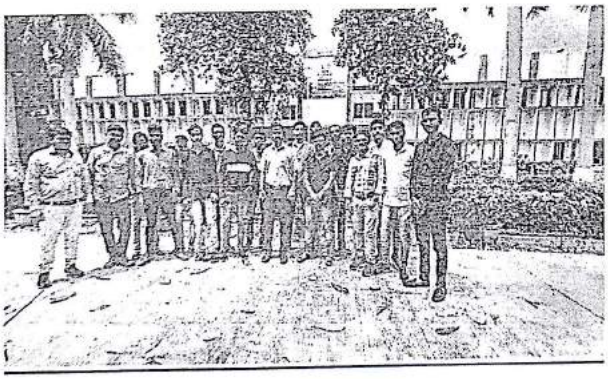


Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## PHOTOS



INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## EVENT SUMMARY

A Fourteen day "Training on Solid works "has been organized by Mechanical engineering department, IIST in association with IGTR, indore from 24/08/2022 to 08/09/2022. The resource Person for the internship was Mr. Prakhar Joshi. The Training was organised for Third Year of the department. Total 44 students participated in the Programme. The session begins with the introductory session on Solid Works. Topics like sketching, modelling, symmetry, patterning were discussed in details with hands on practice. The 14 days training ended with query solving by the expert.

The vote of thanks has been given by faculty coordinator.

**Student Coordinators**
Mr. Sharad Lakhre

**Faculty Coordinator**
Mr.Vipin Patel
Assistant Professor
ME Dept.
IIST

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## CERTIFICATE

MSME TECHNOLOGY CENTRE
(INDO-GERMAN TOOL ROOM, INDORE)
Ministry of Micro, Small & Medium Enterprises
(A Govt. of India Society)

*This is to Certify that*

Shri/Ms. SACHIN KANEL

of INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY, INDORE

*has attended and successfully completed the Training Programme*

on SOLID WORKS (Sponsored by FSDP-ATI Scheme)

*conducted by IGTR, Indore From* 24-08-2022 *to* 06-09-2022

Course Co-Ordinator

Dated : 06-09-2022

HOD (TRG.)
M.K. PALIWAL
M.G.D.
(Trainer)

SECTOR-E INDUSTRIAL AREA, SANWER ROAD, INDORE - 452 015 (M.P.)



Indore Institute of Science & Technology
IQAC
INDORE

Indore Institute of Science & Technology
INDORE

**Addon Course on Advance Java, Module – 1 by Programming World Pvt. Ltd.**

**Indore Institute of Science and Technology**

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date - 08 10 2022

## Approval Letter

To
The Principal,

IIST, Indore

Reference: Requesting approval for conducting Training on Advance Java.

Respected Sir,

With reference to the above, the Department of Computer Science and Engineering is organizing SIG on Advance Java from 12/10/2022 to 09/11/2022 by Mr. Pankaj Wadhwani.

Coordinator

Mr. Jitendra Kutlaste

Thanks

HOD

IQAC

PRINCIPAL

IQAC

Indore Institute of Science & Technology

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date : 10/10/2022

## Notice

All III Year Students of CSE & IT are hereby informed that the department of Department of Computer Science and Engineering has organized training on Advanced Java.
**Speaker** - Mr. Pankaj Wadhwani

All students are requested to take benefit of the same.

**Date:** 12/10/2022

Venue: - IIST Auditorium

Time:-1:00 PM

Coordinator

Mr. Jitendra Kulaste

HOD

Principal

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### Department of Information Technology

| | | |
|---|---|---|
| *Title* | | **Advance Java** |
| Faculty Coordinator | : | Mr. Jitendra Kulaste |
| *Date of Event* | : | 12/10/2022 |
| *Speaker Expert* | : | Mr. Pankaj Wadhwani |

**Summary:**

The Department of Information Technology organized SIG on Advanced Java. The event was taken by Mr. Pankaj Wadhwani. The event was started by making the participants aware of object oriented programming concepts to make a revision of basic java. After that all the modules regarding advance java such as multithreading, networking, RMI etc. were thoroughly discussed. The expert also gave detailed programming insights to students. Students also learned to apply and validate input in a Java program Identify and fix defects and common security issues in code Document a Java program using Javadoc. Use a version control system to track source code in a project.

**Coordinator**
**Mr. Jitendra Kulaste**

IIST

IQAC

Indore Institute of Science & Technology
INDORE

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## "Training on Advance Java"

## Objectives and Outcomes of Activity

### Learning Objectives

The objective of the training is to understand the basic theory underlying machine learning.

- To be able to formulate Advance Java concepts corresponding to different applications.
- To understand a range of Java Classes and packages along with their strengths and weaknesses.
- To be able to apply Advance Java programming skills to solve problems of moderate complexity.
- To apply the algorithms to a real-world problem, optimize the models learned and report on the expected accuracy that can be achieved by applying the models.

### Course Outcomes

After completing this training, the student will be able to

- Appreciate the importance and capabilities of Java Language and its support for Multithreading, Networking, I/O and AWT.
- Read and make elementary modifications to Java programs that solve real-world problems.
- Document a Java program using Javadoc.
- Use a version control system to track source code in a project.
- Understand and implement basic concepts of object oriented programming.

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY, INDORE**
**Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal**

Inside / Outside Resource person detail or profile

| Resource Person | Designation \| Company | Address |
|---|---|---|
| Mr. Pankaj Wadhwani | Director and Co-founder of "Programming World" | 182, Greater Vaishali Nagar, Indore, Madhya Pradesh 452009 |

DEPARTMENT OF COMPUTER SCIENCE & ENGG. IIST

Indore Institute of Science & Technology INDORE

Indore Institute of Science and Technology IQAC INDORE

## Value added Training on CREO by Indo German Tool Room, Indore


INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


Indore Institute of Science and Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

DEPARTMENT OF MECHANICAL ENGINEERING

ACTIVITY NAME:

"One Week Training on CREO"

DATE OF ACTIVITY: 21/11/2022 to 26/11/2022

ACTIVITY COORDINATOR: Mr. Vipin Patel



IQAC

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## ACTIVITY REPORT

Academic Year -2022-23 Session: **July Dec 2022**
Name of Event: **Training**
Date of Event: 21/11/2022 to 26/11/2022 Topic: **"1 Week Training on CREO"**
Organizing Dept.: **ME** Event Coordinator: **Mr . Vipin Patel**

---

Name of Partner / co-organizer (If Industry is involved):IGTR, INDORE
Address: 281/B-302a, Sector 'e', Sanwer Road, Indore, Madhya Pradesh 452003
Contact No.: **07312484423** Email Id: Hr@IGTR.in
Name of Industry Representative: Mr. Prakhar Joshi
Contact No.: Email Id:

---

Name of Expert/Guest: Institute / Company: **IIST , Indore**
Designation: Department:
Address:,
Contact No.: Email Id:

Details of Participants:

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 43 | ME | | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD (ME)

Principal



IQAC

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## APPROVAL LETTER

Date: 06/11/2022

To,

The Principal,
Indore Institute of Science and Technology,
Indore.

Subject: Permission for: **"1 Weeks Training on CREO"**

Respected sir,

We would like to conduct a Training **on CREO** from 21/11/2022 to 26/11/2022. There will be 43 Students from second year Mechanical Engineering. The students will be going to IGTR Indore. This Training is aimed to enhance their knowledge and learn about the latest technology used. We need Transport Facility for the same too.

Kindly permit us for the same.

Thanking You.

Yours sincerely
Mr. Vipin Singh
Assistant Professor
Mechanical Engineering Department
IIST Indore

HOD

Principal



IQAC

Indore Institute of Science & Technology
INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


| TIMELINE | |
|---|---|
| 21/11/22 | The fundamentals of CREO Parametric. |
| 22/11/22 | The fundamentals of CREO Parametric |
| 23/11/22 | Sketching and Extruding |
| 24/11/22 | Sketching and Extruding |
| 25/11/22 | Solid and Surface Modelling |
| 26/11/22 | Solid and Surface Modelling |

## OBJECTIVES & OUTCOMES

OBJECTIVES:

Use the Interface enhancements in Creo Parametric 4.0
Use the Part Modeling enhancements in Creo Parametric 4.0
Use the Sketcher enhancements in Creo Parametric 4.0
Use the Assembly Modeling enhancements in Creo Parametric 4.0
Use the Drawing enhancements in Creo Parametric 4.0
Use the Surfacing enhancements in Creo Parametric 4.0

OUTCOMES:

Students will be able to learn the GUI of CREO parametric 4.0.
Students will be able to sketch drawings.
Students will be able to model the mechanical components.



IQAC

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## RESOURCE PERSON PROFILE

Mr. Prakhar Joshi

**Mr. Prakhar Joshi** is presently working as Mechanical Engineer at IGTR Indore. He is a Mechanical Engineering graduated from Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal, Madhya Pradesh. He has an experience over 5 years is the field of Modeling & Simulation. His expertise is in CAD software as well as in ANSYS. He is also a trainer in the field of CAD. He has delivered more than 15 seminars.

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## PHOTOS

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## EVENT SUMMARY

A six day "Training on CREO" has been organized by Mechanical engineering department, IIST in association with IGTR, indore from 21/11/2022 to 26/11/2022. The resource Person for the internship was Mr. Prakhar Joshi. The Training was organised for Second Year of the department. Total 44 students participated in the Programme. The session begins with the introductory session on CREO Parametric 4.0. Topics like sketching, modelling, symmetry, patterning were discussed in details with hands on practice. The 6 days training ended with query solving by the expert.

The vote of thanks has been given by faculty coordinator.

**Student Coordinators**

Mr. Asmit Verma

**Faculty Coordinator**

Mr.Vipin Patel
Assistant Professor
ME Dept.
IIST

## Addon Course on Data Analytics in R by IIMR, Indore

IIST Indore Institute of Science and Technology

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

# ACTIVITY REPORT

Academic Year -2022-23 Session: July Dec 2022
Name of Event: **Training**
Date of Event: 12/12/2022-23/12/2022
Topic: **"2 WEEK HANDS ON TRAINING ON DATA ANALYTICS IN R"**
Organizing Dept.: ME Event Coordinator: Ms. DURGA PATEL

---

Name of Partner / co-organizer (If Industry is involved):
Address·
Contact No.: Email Id:
Name of Industry Representative:
Contact No.: Email Id:

---

Name of Expert/Guest: Institute / Company: IIST , Indore
Designation: Department:
Address:,
Contact No.: Email Id:
Details of Participants:

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 85 | ME | | |

*Please enclose a detailed list.
Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD (ME)

Principal



IQAC

Indore Institute of Science & Technology INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## APPROVAL LETTER

Date: 06/12/2022

To,

The Principal,
Indore Institute of Science and Technology,
Indore.

Subject: Permission for: **"2 WEEK HANDS ON TRAINING ON DATA ANALYTICS IN R"**

Respected sir,

We would like to conduct a 2 WEEK HANDS ON TRAINING ON DATA ANALYTICS IN R from 12/12/2022-23/12/2022. There will be 85 Students from Final year Mechanical Engineering. The students will be going to IIMR Indore. This Training is aimed to enhance their knowledge and learn about the latest technology used.

Kindly permit us for the same.

Thanking You.

Yours sincerely
Mr. Durga Patel
Assistant Professor
Mechanical Engineering Department
IIST Indore

Principal

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


| TIMELINE | |
|---|---|
| 12/12/22 | Basic Introduction to R |
| 13/12/22 | Basic Introduction to R |
| 14/12/22 | Basic Introduction to R |
| 15/12/22 | Mathematical Operations used in R |
| 16/12/22 | Mathematical Operations used in R |
| 19/12/22 | Mathematical Operations used in R |
| 20/12/22 | Graph Plotting in R |
| 21/12/22 | Graph Plotting in R |
| 22/12/22 | Applications in Statistics |
| 23/12/22 | Applications in Statistics |

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

# OBJECTIVES & OUTCOMES

Objective:

The objective of this module to make students exercise the fundamentals of statistical analysis in R environment. They would be able to analysis data for the purpose of exploration using Descriptive and Inferential Statistics. Students will understand Probability and Sampling Distributions and learn the creative application of Linear Regression in multivariate context for
predictive purpose.

Outcome:

After the successful completion of this module, students will be able to:

- Install, Code and Use R Programming Language in R Studio IDE to perform basic tasks on Vectors, Matrices and Data frames.
- Describe key terminologies, concepts and techniques employed in Statistical Analysis.
- Define, Calculate, Implement Probability and Probability Distributions to solve a wide variety of problems.
- Conduct and Interpret a variety of Hypothesis Tests to aid Decision Making.
- Understand, Analyse, Interpret Correlation and Regression to analyse the underlying relationships between different variables

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

# RESOURCE PERSON PROFILE

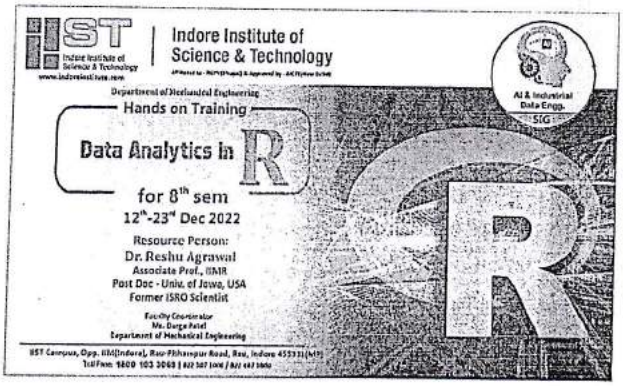
Dr. Reshu Agarwal is an Associate Professor at IIMR. She has 18 years of rich experience in statistics and data science. Before joining IIMR, she was a faculty member in the School of Data Science and Forecasting (Devi Ahilya Vishwavidyalaya – DAVV, Indore), Department of Mathematics and Statistics (Acadia University, Nova Scotia, Canada) and Forestry and Ecology Division (Indian Institute of Remote Sensing – IIRS, Dehradun). Dr. Reshu is a former ISRO scientist and MPhil topper. Her PhD is based on statistical modelling using satellite data. She also held two postdoctoral fellowships in her credit (University of Iowa, USA and GGSIP university, Delhi). She is a winner of two best paper awards and published 27 research papers in peer reviewed national and international journals, conference proceedings, technical reports, and book chapters.

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## QUESTION WISE FEEDBACK SUMMARY

| | Strongly Agree 5 | Agree 4 | Neutral 3 | Partially Agree 2 | Disagree 1 | COUNT | TOTAL |
|---|---|---|---|---|---|---|---|
| Q-1 | 47 | 30 | 8 | 0 | 0 | 85 | 379 |
| Q-2 | 50 | 24 | 11 | 0 | 0 | 85 | 379 |
| Q-3 | 38 | 24 | 23 | 0 | 0 | 85 | 355 |
| Q-4 | 48 | 16 | 21 | 0 | 0 | 85 | 367 |
| Q-5 | 43 | 18 | 24 | 0 | 0 | 85 | 359 |
| Q-6 | 51 | 14 | 20 | 0 | 0 | 85 | 371 |
| Q-7 | 47 | 14 | 24 | 0 | 0 | 85 | 363 |
| Q-8 | 59 | 20 | 6 | 0 | 0 | 85 | 393 |
| Q-9 | 50 | 14 | 21 | 0 | 0 | 85 | 369 |
| Q-10 | 40 | 17 | 28 | 0 | 0 | 85 | 352 |

## POSTER






IQAC

Indore Institute of Science & Technology
INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## EVENT SUMMARY

A Ten day "Training on R" has been organized by Mechanical engineering department, IIST in association with IIMR, indore from 12/12/2022 to 23/12/2022. The resource Person for the internship was Ms. Reshu Agrawal. The Training was organised for Final Year of the department. Total 85 students participated in the Programme. The session begins with the introductory session on R. Topics like GUI of R, Basic Introduction, Mathematical operations, Graph Plotting & Applications of R were discussed in details with hands on practice. The 10 days training ended with query solving by the expert.

The vote of thanks has been given by faculty coordinator.

**Student Coordinators**
Mr. Ayushman Jain

**Faculty Coordinator**
Ms. Durga Patel
Assistant Professor
ME Dept.
IIST

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Addon Course on AI Based Product Development (Basis) by Codenscious Technologies Pvt. Ltd.**



**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date: 14/12/2022

## Approval letter

To,
The Principal
Indore Institute of Science and Technology, Indore

Subject: Proposal for One week training on "AI Product Development" from 16th to 22nd Dec 2022.

Respected sir,
Department of Information Technology is planning to organize a one week training cum certification program on AI Product Development for the students of B Tech 2nd Year (CSE, IT, AIML and EC) from 16th to 22nd December 2022 at 9:30 am to 3:30 pm. The expert is Mr Shaving Triwedi. It is our request to kindly allow us for the same.
For salutation of the guest, we request you to kindly provide:

1. Refreshment for 5 and lunch for 2 persons.

Put up for your kind approval.

Put up for your kind approval.

Yours faithfully
Ms. Shruti Sharma
Assistant Professor
Computer Science & Engineering Department
IIST Indore

HOD
DEPARTMENT OF INFORMATION TECH.

IQAC
Indore Institute of Science and Technology
INDORE

IQAC
Indore Institute of Science and Technology
INDORE

Indore Institute of Science & Technology
INDORE

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**ore Institute of Science and Technology**
Indore Institute of Science and Technology Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## Event Report

Academic Year -2022-2023 Session: July-Dec-2022

Name of Event: Training cum Certification Program

Start Date of Event: 16/12/22 Topic: AI Based Product Development

End Date of Event: 22/12/22

Organizing Dept.: IT Event Coordinator: Ms. Shruti Sharma

---

Name of Trainer: Mr. Shivang Trivedi
Institute / Company: Codenscious, Indore
Designation: Trainer Department: IT
Address: Kesar Bagh, Indore

Contact No.: 8989452663 Email Id: shivang_trivedi@codenscious.ai

**Details of Participants:**

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 255 | CSE/IT/AI-ML | 1 | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary of events. (Outcome)
4. Notice to students and faculty (Notice board notice copy, WhatsApp/ Mail information copy) :
5. List of Participate and Day wise attendance

HOD
DEPARTMENT OF INFORMATION TECH.

IQAC

Principal

Indore Institute of Science & Technology INDORE

Indore Institute of Science & Technology IQAC INDORE

# Shivang Trivedi

**Expert AI Consultant**

shivang_trivedi@codenscious.ai
+91 (898) 945 2663

**LinkedIn**
https://www.linkedin.com/in/shivang-trivedi-704a4b127/

## Executive Summary

Shivang is an Entrepreneur and AI Consultant. He has his experience in Deep Learning, Algorithm Design and Software Project Management. He has founded multiple companies in the AI space namely mEinstein LLC, Codenscious Technologies Pvt Ltd and CTL Indore. Working with very senior people in the industry, he has successfully designed, developed and deployed complex AI Solutions in various industries like healthcare, logistics and Retail. Shivang is a graduate of Indian Institute of Technology Roorkee and has a keen interest in Teaching AI to people.

## Key Expertise

- **Algorithm Designer**
  Developing scalable software systems for solving real world computing problems.

- **Deep Learning Researcher**
  Studying fundamental mathematical constructs behind deep neural networks for implementing in Computer Vision and Natural Language Processing.

- **Software Project Management**
  Agile Development Master having rich experience of Training, Building and Managing Agile Teams specialised in development of Enterprise Software Applications

- **AI Consultant**
  Architectured & Delivered AI Powered Technology Solutions for complex Business Problems in Retail, Health Care, Quality Assurance and Logistics

DEPARTMENT OF
INFORMATION TECH.

Indore Institute of Science & Technology
INDORE

Indore Institute of Science & Technology
IQAC
INDORE

## Employment History

### Managing Director at Codensclous Technologies Pvt Ltd

***2017 - Present***

Codenscious Technologies has a rich experience of building AI Enabled Enterprise Grade Web and Mobile based software applications for industry specific needs. Offering Cutting Edge Technology, High Standards of Design and Coding practices and Project Management Practices, we are a team of highly skilled software engineers, data scientists and project managers who thrive to take on challenging technological endeavors.

- **AI and Deep Learning**

Artificial Intelligence, Machine Learning & Deep Learning being the core competency, the company has successfully completed numerous Computer Vision and NLP projects including an entire spectrum of Intelligent Image and Video Analytics and Cutting Edge Language Modelling Systems.

- **Mobile First AI**

Our continuously evolving Mobile Based Real Time Intelligent Video Analytics Technology requires no server side costly GPU computation and makes the entire system much more scalable and cost effective. This includes mobile based State of the Art Human Pose Estimation and Object Recognition Pipelines streaming only the required meta data for business logics.

- **AI on the EDGE**

On the Edge Computing Side, company have ready to use system infrastructure softwares ready for all major Edge platforms including NVEDIA Jetson, Intel Compute Sticks, Google Coral TPUs and we are continuously updated with the latest innovations.

### CTO at mEinstein LLC

***2018 - 2020***

It is a voice-controlled personal AI system that can take instructions, observe, advise, reason, plan, and act on your behalf. It acts like your shadow brain – your productive persona.

- **Personalised Artificial intelligence as unique as the User**

Understands you in natural language, analyses a vast amount of your personal data and provides informed decisions and outcomes while continuously learning about you.

- **Pattern recognition, Inferences, Predictions, Advices and Actions**

mE learns without being intrusive or obnoxious. If you like weekend golf, mE will take note of that preference and not send a service provider to fix your house during your round.

- **Learning and Improving every day**

mE is always learning and growing. The more you interact with mE, the more it will become your true shadow brain.

### Director of Education, CTL Indore

***2017 - 2019***

At CTL we find and train through a strict selection process the Real CS Geeks who are willing to pursue Artificial Intelligence as a career option not just because of a high package but because of the brute

DEPARTMENT OF
INFORMATION TECH.

IQAC

Indore Institute of Science & Technology

passion of problem solving building technology.

We look for people who want to become very competitive programmers and are willing to take on the quest of learning techniques of solving challenging problems in Computer Science, understand the Mathematics of Intelligence and work with us as Deep Learning Engineers.

## Top Projects

- **Helping Physiotherapists better Diagnose Musculoskeletal Disorders with Real Time Human Pose Estimation and Fuzzy Logic**

Enhancing the performance and processing speed by 120 times of a Cloud Based AI Solution of a Med-Tech Corp for diagnosis of musculoskeletal disorders optimizing Fuzzy Logic and Deep Learning based Real Time Human Pose Estimation on an IOS Device, saving $1.5M per annum on scalability of 100,000 users.

- **Smart Camera System for Cargo Theft Security**

Smart Camera System for cargo theft security in trucks while transportation for Leading logistics company by optimising single shot object detection convolutional neural network architectures on Nvidia Jetson Nano.

- **AI in Retail Analytics**

AI Scalable Video Analytics Technology for Smart CCTV systems for customer behaviour analysis, pre sales-analytics, store management and security in retail.

## Recommendations

*"Shivang is a problem solver and has deep understanding of algorithms. He can build sound programming logic to solve real world problems. His sessions were very well received particularly his authority in the image recognition and pose detection was admired. He has built models that creatively tracks human poses. During the interactions, found him to be generative in solution development and expressing in a convincing manner. He is a quick learner and hence can flex in the newer domains too and can quickly provide remarkable results. He appears to have a knack in detailing pattern recognition and machine learning model intricacies in a easily understandable manner which engages audience in the training."*

**- Mouly BC**
**Senior Director & Head of Learning and Development at Cyient Ltd**

*"I was on the hunt to find a "superstar" in the filed of ML and AI with a deep management background in finance and operations from a top notch school to embark on a very sophisticated project. It took me 6 months to find Shivang but it was worth the wait. Under his guidance and leadership we have created something that is absolutely groundbreaking. If you are looking for someone whom you can fully trust, is reliable, honest, self-starter, true to his word and most importantly capable - SHIVANG IS YOUR GO-TO GUY"*

- **Prithwi Thakuria**

**Partner & Global Leader, Services for Data Platforms at IBM**

## Education

**Integrated Dual Degree Bachelor of Technology in Process Engineering & MBA - Indian Institute of Technology Roorkee**

DEPARTMENT OF INFORMATION TECH.

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### Department of Information Technology

### Summary/Report for Training on "AI Bases Product Development"

| | | |
|---|---|---|
| *Title* | : | AI Based Product Development |
| *Date of Event* | : | 16/12/2022 to 22/12/2022 |
| *Trainer* | : | Mr.Shivang Trivedi |
| *Coordinator* | : | Ms. Shruti Sharma |

**Summary**:


Information Technology department organized a training cum certification program on "AI Based Product Development" for 42 hours. The Training has been taken by Mr. Shivang Trivedi. He gave training on Machine Learning and Deep Learning techniques from scratch and he explains so many important concepts of EDA, PCA, basic models from training to testing the entire dataset. The technology is very demanding and has a great potential to accelerate the career of students. The main purpose of this training was to enable students to get detailed insights of AI with hands-on to some models. This Training was very beneficial for students looking towards the industry point of view and to make decision about their career prospect in AI product development. So that we cover the main tagline of our institute that is employability quotient and holistic development of students this kind of training proves that we work for the development of students to make industry ready.


DEPARTMENT OF
INFORMATION TECH.

IQAC

Indore Institute of Science & Technology
INDORE

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## "AI Based Product Development"

## Objectives and Course Outcomes

### Learning Objectives

The objective of the training is

- To understand the applications and demand of AI based projects.
- To be able to create/understand the code of python programming languages.
- To understand the technical knowledge of Data Science and Machine Learning models.
- To be able to enhance the competency level of students as per the industry requirements.

### Course Outcomes

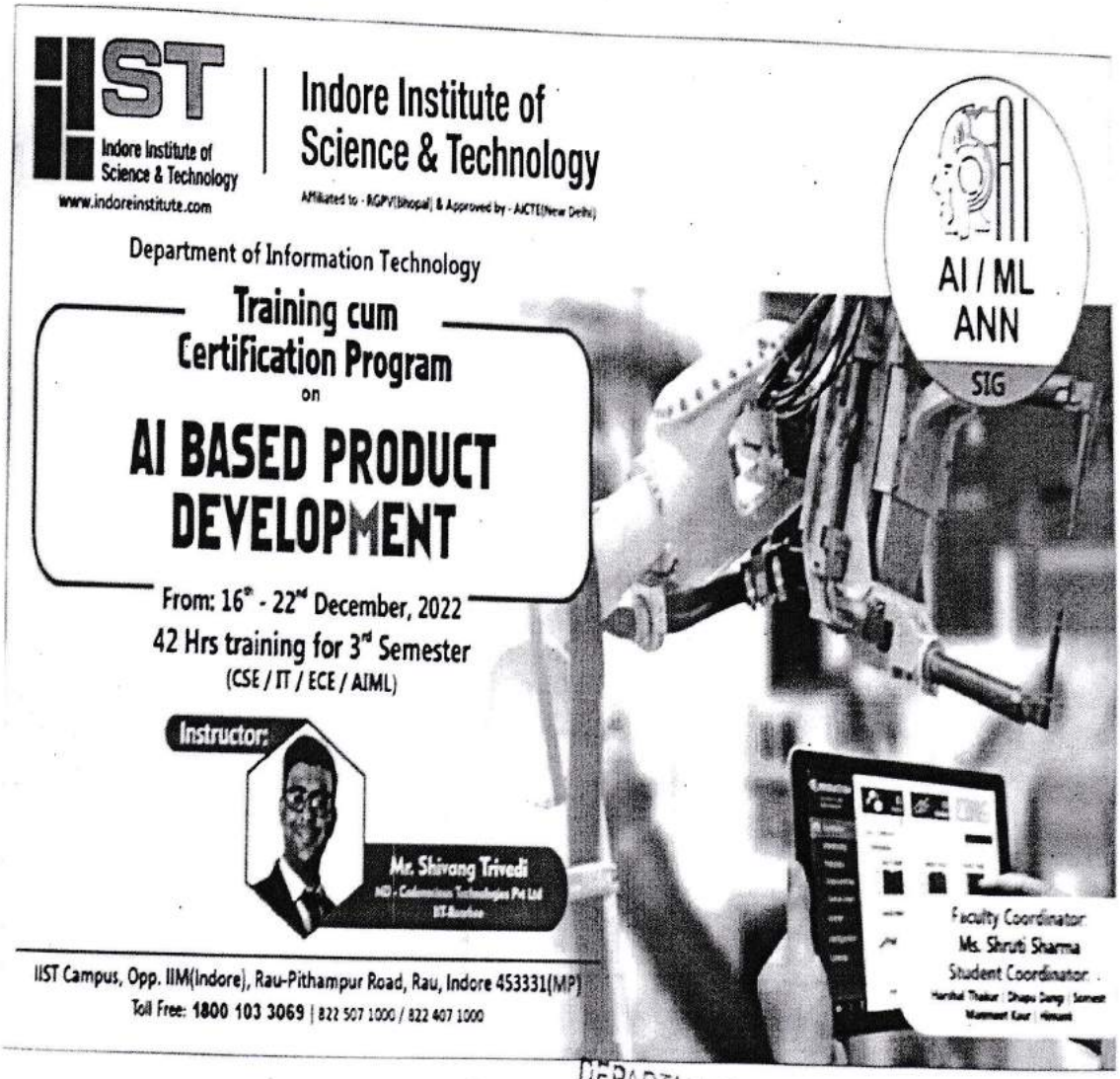
After completing this training, the student will be able to

- Appreciate the importance of AI in various domains.
- Apply competency towards the development of machine learning models.
- Understand a very broad and collective knowledge of applying different datasets from preprocessing to training and testing the models
- Apply the knowledge of python to develop ML models.

DEPARTMENT OF
INFORMATION TECH.

Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE




DEPARTMENT OF INFORMATION TECH.

IQAC

Indore Institute of Science & Technology
INDORE

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Addon Course on AI Based Product Development (Advance) by Codenscious Technologies Pvt. Ltd.**

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date: 27/12/2022

## Approval letter

To,
The Principal
Indore Institute of Science and Technology, Indore

**Subject: Proposal for 35 hours training on "AI Based Product Development" from 2nd to 10th Jan 2023.**

Respected sir,

Department of AIML is planning to organize a **35 hours training** program on **AI Based Product Development** for the students of B Tech 3rd Year (CSE, IT) from **2nd to 10th Jan 2023** at 9:30 am to 3:30 pm. The expert is Mr Shaving Triwedi. It is our request to kindly allow us for the same.

For salutation of the guest, we request you to kindly provide:

1. Refreshments for 5 and lunch for 2 persons.

Put up for your kind approval.

Yours faithfully
***Mr. Umesh Kumar Sahu***
***Assistant Professor***

HOD
DEPARTMENT OF AIML

Indore Institute of Science and Technology IQAC INDORE

**Principal**
Dr. Keshav Patidar

Indore Institute of Science and Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

IIST
Indore Institute of Science & Technology
www.indoreinstitute.com

Indore Institute of Science & Technology

Affiliated to - RGPV(Bhopal) & Approved by - AICTE(New Delhi)

Department of AIML

AI / ML
ANN
SIG

## Training cum Certification Program

on

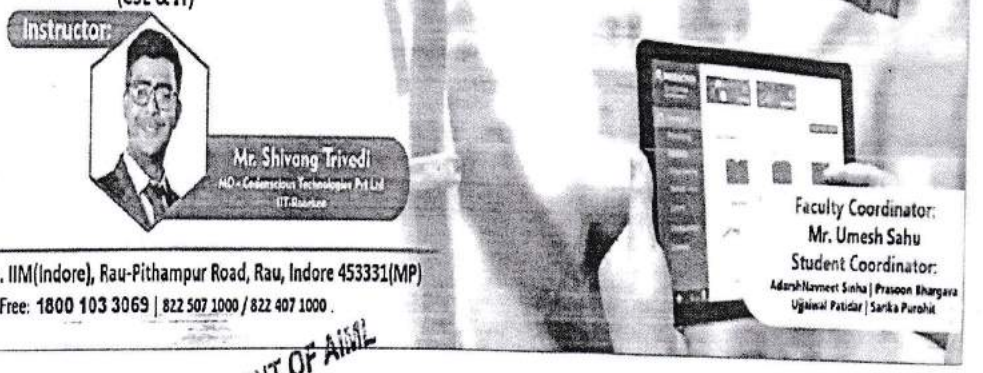
# AI BASED PRODUCT DEVELOPMENT

From: 2nd - 10th Jan, 2023

Time: 9.00 AM - 3.30 PM | Venue : Audi-1, IIST

35 Hrs training for 3rd Year

(CSE & IT)



Instructor:



Mr. Shivang Trivedi

HQ - Codevision Technologies Pvt Ltd

IIT-Roorkee

Faculty Coordinator:
Mr. Umesh Sahu

Student Coordinator:
Adarsh Navneet Sinha | Prasoon Bhargava
Ujjawal Patidar | Sarika Purohit

IIST Campus, Opp. IIM(Indore), Rau-Pithampur Road, Rau, Indore 453331(MP)

Toll Free: 1800 103 3069 | 822 507 1000 / 822 407 1000

DEPARTMENT OF AIML

Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## Department of AIML

Summary/Report for Training

on

**"AI Bases Product Development"**

| | | |
|---|---|---|
| *Title* | : | AI Based Product Development |
| *Date of Event* | : | 02/01/2023 to 10/01/2023 |
| *Trainer* | : | Mr.Shivang Trivedi |
| *Coordinator* | : | Mr. Umesh Kumar Sahu |

**Summary:**

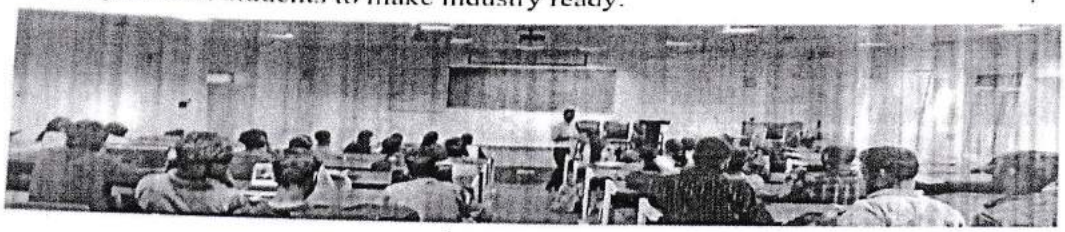
The AIML department organized a training program on "AI Based Product Development" for 35 hours. The Training has been taken by Mr. Shivang Trivedi. He gave training on Machine Learning and Deep Learning techniques from scratch and he explains so many important concepts of EDA, PCA, basic models from training to testing the entire dataset. The technology is very demanding and has a great potential to accelerate the career of students. The main purpose of this training was to enable students to get detailed insights of AI with hands-on to some models. This Training was very beneficial for students looking towards the industry point of view and to make decision about their career prospect in AI product development. So that

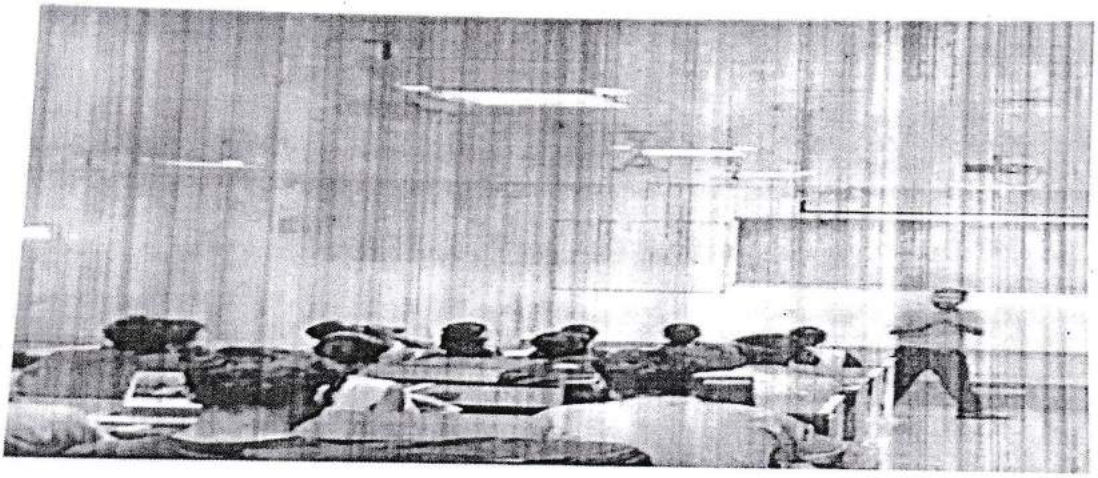
DEPARTMENT OF AIML

Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

we cover the main tagline of our institute that is employability quotient and holistic development of students this kind of training proves that we work for the development of students to make industry ready.





DEPARTMENT OF AIML

IQAC

Indore Institute of Science & Technology

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

# AI Based Product Development

## Objectives and Course Outcomes:-

➢ **Learning Objectives**

**The objective of the training is**

- To understand the applications and demand of AI based projects.
- To be able to create/understand the code of python programming languages.
- To understand the technical knowledge of Data Science and Machine Learning models.
- To be able to enhance the competency level of students as per the industry requirements.

➢ **Course Outcomes**

**After completing this training, the student will be able to-**

- Appreciate the importance of AI in various domains.
- Apply competency towards the development of machine learning models.
- Understand a very broad and collective knowledge of applying different datasets from preprocessing to training and testing the models
- Apply the knowledge of python to develop ML models.

DEPARTMENT COMPUTER IIST

IQAC INDORE

Indore Institute of Science & Technology

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## Addon Course on SQL using Data Science by Turning Points

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## Event Report

Academic Year -2022-2023 Session: Jan-June-2023

Name of Event: Training cum Certification Program

Start Date of Event: **02/01/23** Topic: **SQL using Data Science**

End Date of Event: **10/01/23**

Organizing Dept.: IT Event Coordinator: **Prof. Megha Birthare**

---

Name of Trainer: Mr. Ankush Saklecha
Institute / Company: IIST, Indore
Designation: Cooperate Trainer
Address: IIST, Indore

Contact No.: 9685285381 Email Id: ankush.saklecha@indoreinstitute.com

**Details of Participants:**

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 218 | CS/IT | 1 | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary of events. (Outcome)
4. Notice to students and faculty (Notice board notice copy, WhatsApp / Mail information copy) :
5. List of Participate and Day wise attendance

HOD 27/12/22

Indore Institute of Science and Technology IQAC INDORE

Principal

Indore Institute of Science and Technology IQAC INDORE

Indore Institute of Science & Technology

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date: 27/12/2022

### Approval letter

To,

The Principal

Indore Institute of Science and Technology, Indore

**Subject: Proposal for 35 hours training on "SQL using Data Science" from 2nd to 10th Jan 2023.**

Respected sir,

Department of Computer Science and Engineering is planning to organize a **35 hours training** cum certification program on **SQL using Data Science** for the students of B Tech 4th Year (CSE, IT) from **2nd to 10th Jan 2023** at 9:30 am to 3:30 pm. The expert is **Mr. Ankush Saklecha**. It is our request to kindly allow us for the same.

For salutation of the guest, we request you to kindly provide:

1. Refreshments for 5 and lunch for 2 persons.

Put up for your kind approval.

Yours faithfully 27/12/22

**Prof. Megha Birthare**

**Assistant Professor**

Computer Science & Engineering Department

IIST Indore

**HOD**
Prof. Margi Patel

Indore Institute of Science and Technology IQAC INDORE

**Principal**
Dr. Keshav Patidar

Indore Institute of Science and Technology IQAC INDORE

Indore Institute of Science & Technology

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

**Department of Information Technology**

Summary/Report for Training
on

**"SQL using Data Science"**

| | | |
|---|---|---|
| *Title* | : | AI Based Product Development |
| *Date of Event* | : | 02/01/2023 to 10/01/2023 |
| *Trainer* | : | **Mr. Ankush Saklecha** |
| *Coordinator* | : | Prof. Megha Birthare |

**Summary:**

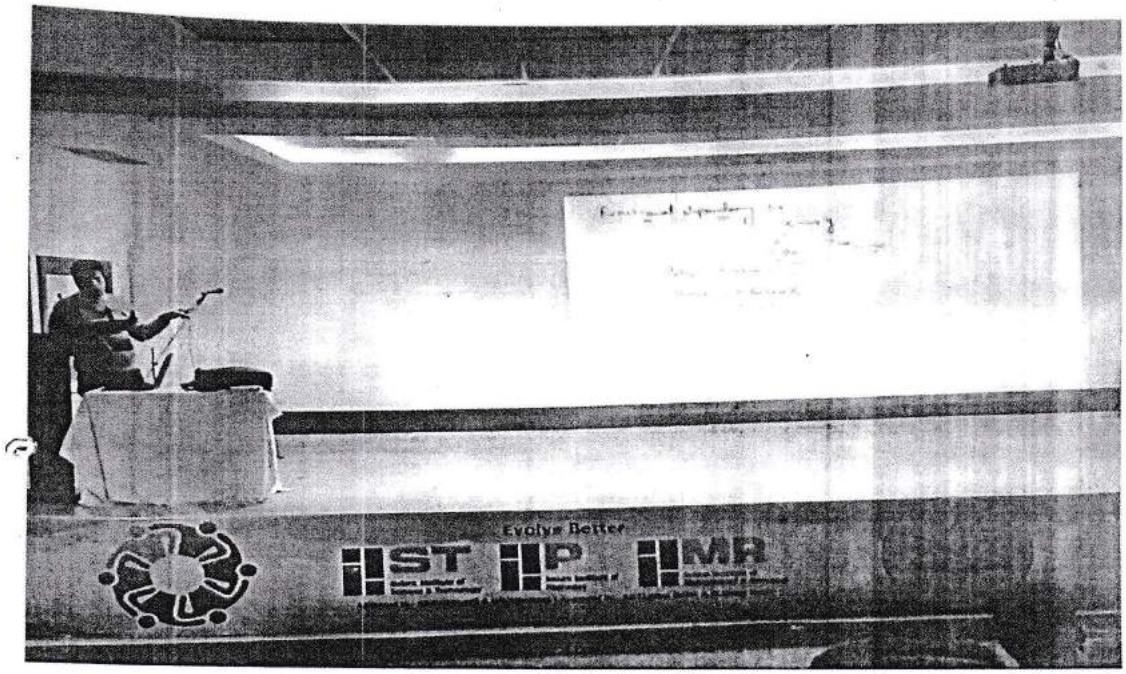
Information Technology department organized training cum certification program on "SQL using Data Science" for 35 hours. The Training has been taken by Mr. Ankush Saklecha. He gave training on Machine Learning and Deep Learning techniques from scratch and he explains so many important concepts of EDA, PCA, basic models from training to testing the entire dataset. The technology is very demanding and has a great potential to accelerate the career of students. The main purpose of this training was to enable students to get detailed insights of AI with hands-on to some models. This Training was very beneficial for students looking towards the industry point of view and to make decision about their career prospect in AI product development. So that we cover the main tagline of our institute that is employability quotient and holistic development of students this kind of training proves that we work for the development of students to make industry ready.

Indore Institute of Science & Technology * IQAC * INDORE *

Indore Institute of Science & Technology * IIDC *

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**




Indore Institute of Science & Technology

Indore Institute of Science & Technology
IQAC
INDORE

IIST Indore Institute of Science & Technology

www.indoreinstitute.com

## Indore Institute of Science & Technology

Affiliated to - RGPV(Bhopal) & Approved by - AICTE(New Delhi)

Database Management System SIG

Department of Information Technology

## Training on SQL for data Science

35 Hrs training

for CSE/IT/ECE-Final year

Date: 2 - 10 Jan. 2023 | Time: 9:00 AM - 3:30 PM

Venue : Audi-2, IIST

Instructor:

**Mr. Ankush Saklecha**

Corporate Trainer, GATE Expert, 13 Times GATE Qualified

Coordinator:

Ms. Megha Birthare

Student Cordinators:

Bakram Raghuvanshi | K Dhawal Verma

Aman Gupta | Sabahat Ahmed

IIST Campus, Opp. IIM(Indore), Rau-Pithampur Road, Rau, Indore 453331(MP)

Toll Free: 1800 103 3069 | 822 507 1000 / 822 407 1000

Indore Institute of Science and Technology IQAC INDORE

Indore Institute of Science & Technology

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Certificate Course on Applications of data science for chemical engineer through SPSS**

## Indore Institute of Science and Technology

### Event Report (Off Campus)

Academic Year – 2022-2023 Session: Jan- June 2023

Name of Event: Certification Course

Date of Event: 2nd January 2023, Topic: Applications of Data Science for Chemical Engineer through SPSS

Organizing Dept.: Chemical, Event Coordinator: Dr. Samatha Singh

---

Name of Partner / co-organizer (If Industry is involved):

Address:

Contact No.:, Email Id:

Name of Industry Representative:

Contact No., Email Id:

---

Name of Expert/Guest: _Assistant Professor, Ms. Palak Shah

Institute / Company: Indore Institute of Science and Technology, Indore

Designation: Assistant Professor, Department: Chemical

Address: IIST Indore (M.P.);

Contact No.: +91-9893480934 Email Id: palak.shah@indoreinstitute.com;

**Details of Participants:**

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 50 | CM | 00 | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD

DEPARTMENT OF CHEMICAL ENGG. IIST

Principal

IQAC

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

DATE: 26/12/2022

# Approval Letter

Department of Chemical Engineering interested to organize certification course on **"Applications of Data Science for Chemical Engineers through SPSS"** from 2nd January 2023 onwards. Kindly approve for organizing the certification course in the department.

Proposal and Budget enclosed herewith.

**HOD CM**

**PRINCIPAL**

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Indore Institute of Science & Technology**

**Department of Chemical Engineering**

**NOTE SHEET** Date: 27/12/2022

We are pleased to inform you that we are organising Certification on **"Application for Data Science for chemical engineers using SPSS"** from 2nd January 2023. In this we are planning to provide knowledge of SPSS software with the better handling facilities at IIST Indore. The determination of the specific variables and coding that offers the solutions are going to be taught to the students from the basic level.

HOD

CHEMICAL

PRINCIPAL

## Indore Institute of Science and Technology, Indore
## Department of Chemical Engineering

Date: 22/12/2022

Note sheet

To,
The Director General,
IIST/IIP/IIMR

Subject: Requirement for the training on " **Application of Data science for chemical Engineers through SPSS software.**" for IV Year students.

This is with regards with the above mentioned subject matter. For successfully completion of the training on "Application of Data science for chemical Engineers through SPSS software" under skill up session, we require the following items-

1. No of Certificate – 60
2. No of Prizes – 2 (I prize worth Rs.1000/- and II prize worth of Rs. 500/-)
3. Honorarium to expert (worth Rs.400 per Hour *30 hours= Rs.12000/-)

Please do the needful.

Dr. Samatha Singh
Head
Chemical Engineering Dept.

24/12/22

27/12

IQAC

Institute of Science & Technology

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## Department of Chemical Engineering

## Indore Institute of Science & Technology

NOTE SHEET

Date: 30/12/2022

We are pleased to inform you that we are organizing Certification course on "Applications of Data Science for Chemical Engineers through SPSS" from 2nd January 2023 to 14th January 2023. In this we are planning to provide knowledge of SPSS Statistics and tools that are used to create statistical and modeler information. It requires the configuration of Operating System Microsoft Windows 7, 8, 10 available, Microsoft Windows 8.1 and Microsoft Windows 7 SP1, Memory 4 GB of RAM and Disk Space Installation 7 GB. Kindly provide the computer block A Lab which has similar operating systems.

30/12/22

**Dr. Samatha Singh**
**Head, Chemical Engg. Dept.**
**IIST, Indore**

**Dr. Keshav Patidar**
**Principal**
**IIST, Indore**

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**30 hrs Training Program**
**On**
**"DATA SCIENCE USING SPSS SOFTWARE"**

**Under the SIG**

**Computational Numerical Statistics**

**From 2nd January 2023**

## ABOUT THE TRAINING PROGRAME

This course aims to equip learners with ability of independently carrying out in-depth data analysis with professional confidence and accuracy. It will specifically help those looking to derive business insights, understand consumer behaviour, develop objective plans for new ventures, brand study, or write a scholarly articles in high impact journals and develop high quality thesis/project work.

A good knowledge of quantitative data analysis is a sine qua none for progress in academic and corporate world. Keeping this in mind this course has been designed in such way that students, researchers, teachers and corporate professionals who want to equip themselves with sound skills of data analysis and wish to progress with this skill can learn it in in-depth and interesting manner using IBM SPSS Statistics.

The focus of current training program will be to help participants learn statistical skills through exploring SPSS and its different options. The focus will be to develop practical skills of analyzing data, developing an independent capacity to accurately decide what statistical tests will be appropriate with a particular kind of research objective. **The program will also cover how to write the obtained output from SPSS in APA format.**

The training on "**Application of Data science for chemical Engineers through SPSS software**" will give exposure of SPSS software to 4thyr students under the SIG named **Computational Numerical Statistics**. It will give expertise onprocess simulators used in Chemical industries which covers wide spectrum of industries like Oil & Gas Production, Chemical, Nuclear Fuel Processing, Petroleum Refining, Gas Supply, Electricity Generation, Steel, Water & Sewerage, Food& Dairy Industry. The trainingfocuses on more practical industrialproblems based on Heat Transfer, Fluid Mechanics, Chemical Engineering Thermodynamics, Mass Transfer and Chemical Reaction Engineering.

## ABOUT THE INSTITUTE

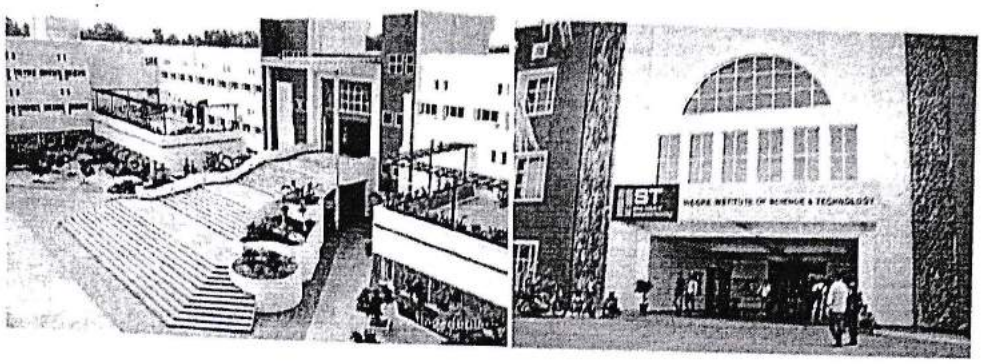
**Indore Institute of Science and Technology, Indore (IIST),** Indore Institute of Science &Technology (IIST) established in the year 2003, is amongst the Top 5 Engineering Colleges of Indore. The Institute is approved by AICTE, New Delhi and affiliated to RGPV Bhopal offering Bachelor's and Master's Degree in Engineering. At IIST, we are committed to enhance the employability Quotient of the Students along with Holistic Development. The Institute has tie–up with premier IITs (Delhi & Bombay) for Academic Excellence in the

DEPARTMENT OF CHEMICAL ENGG IIST

Indore Institute of Science and Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

areas of Virtual Labs, e-Yantra, etc. We have well-qualified faculty team, mostly with Ph.D degree in the latest technological domains. Our Technology enabled Flipped Classroom pedagogy enhances the student engagement in the classroom and make them focused on the practical aspects of the subject. The institute has created, dedicated Special Interest Groups (SIGs) to enable the faculty and staff to work on the latest technologies in the newly established State of the art Lab Infrastructure for Internet of Things (IoT), Apple iOS application development, Cloud Computing, Data Analytics, Artificial Intelligence, Robotics, Aero Modelling, Waste Water Treatment, Water Harvesting, etc.



## Learning objectives of Training Programme

- To independently analyze and treat data, plan and carry out new research work based on your research interest
- To equip themselves with sound skills of data analysis
- To knowledge of quantitative data analysis is a sine qua none for progress in academic and corporate world

## Outcomes of Training Programme:

- Analyse any type of numerical data using SPSS with confidence
- Independently plan your research study from scratch.
- Understand the research design and results presented in high quality journal articles
- Do data analysis accurately and present the results in standard format.

DEPARTMENT CHEMICAL ENGG.

Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

## COURSE CONTENT FOR SPSS

**Introduction**

- Introduction to SPSS
- Data analysis with SPSS: general aspects, workflow, critical issues
- SPSS: general description, functions, menus, commands
- SPSS file management
- A brief theoretical recap of the statistical analysis tools and techniques

**Input and data cleaning**

- Defining variables
- Manual input of data
- Automated input of data and file import
- Data cleaning

**Data manipulation**

- Data Transformations
- Data file management
- Syntax files and scripts
- Output management

**Descriptive analysis of data**

- Frequencies

Indore Institute of Science and Technology IQAC INDORE

DEPARTMENT CHEMICAL ENGG. IIST

Indore Institute of Science & Technology INDORE

- Descriptives
- Explore
- Crosstabs

**Statistical tests**

- Means
- T-test
- One-way ANOVA
- Non parametric tests
- Normality tests

**Correlation and regression**

- Linear correlation and regression
- Multiple regression (linear)

**Multivariate analysis**

- Factor analysis
- Cluster analysis

**Final test**

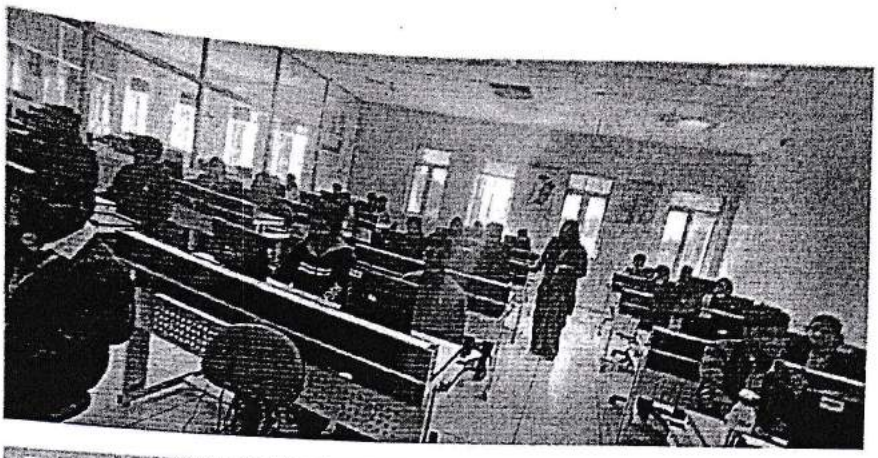
DEPARTMENT CHEMICAL ENGG.

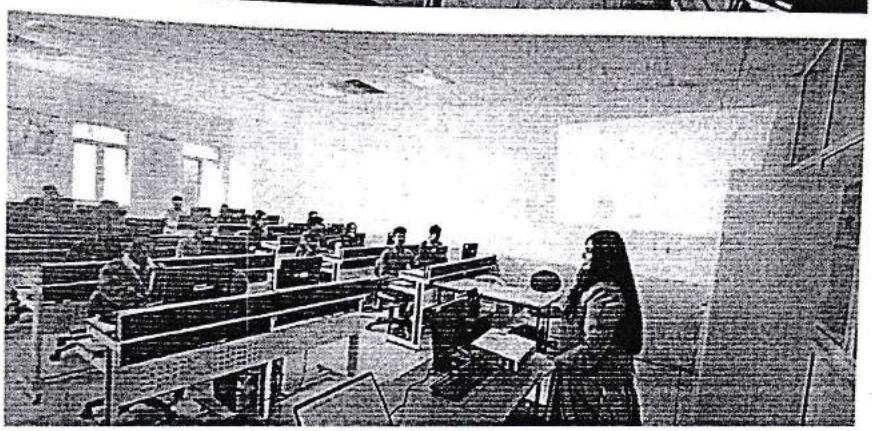
Indore Institute of Science & Technology INDORE

IOAC Indore Institute of Science and Technology INDORE

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**





Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

DEPARTMENT CHEMICAL ENGG. IIST

## PPlot

### Notes

| | | |
|---|---|---|
| Output Created | | 05-JAN-2023 11:30:02 |
| Comments | | |
| Input | Active Dataset | DataSet0 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 26 |
| | Date | <none> |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | For a given sequence or time series variable, cases with missing values are not used in the analysis. Cases with negative or zero values are also not used, if the log transform is requested. |
| Syntax | | PPLOT<br>/VARIABLES=Gender Experience Educationlevel<br>/NOLOG<br>/NOSTANDARDIZE<br>/TYPE=P-P<br>/FRACTION=BLOM<br>/TIES=MEAN<br>/DIST=NORMAL. |
| Resources | Processor Time | 00:00:00.98 |
| | Elapsed Time | 00:00:00.93 |
| Use | From | First observation |
| | To | Last observation |
| Time Series Settings (TSET) | Amount of Output | PRINT = DEFAULT |
| | Saving New Variables | NEWVAR = CURRENT |
| | Maximum Number of Lags in Autocorrelation or Partial Autocorrelation Plots | MXAUTO = 16 |

DEPARTMENT CHEMICAL ENGG. IIST
IQAC Indore Institute of Science & Technology INDORE
Indore Institute of Science & Technology INDORE

## Model Description

| | | | |
|---|---|---|---|
| Model Name | | MOD_1 | |
| Series or Sequence | 1 | Gender | |
| | 2 | Experience | |
| | 3 | Educationlevel | |
| Transformation | | None | |
| Non-Seasonal Differencing | | | 0 |
| Seasonal Differencing | | | 0 |
| Length of Seasonal Period | | No periodicity | |
| Standardization | | Not applied | |
| Distribution | Type | Normal | |
| | Location | estimated | |
| | Scale | estimated | |
| Fractional Rank Estimation Method | | Blom's | |
| Rank Assigned to Ties | | Mean rank of tied values | |
| Applying the model specifications from MOD_1 | | | |

## Case Processing Summary

| | | Gender | Experience | Educationlevel |
|---|---|---|---|---|
| Series or Sequence Length | | 26 | 26 | 26 |
| Number of Missing Values in the Plot | User-Missing | 0 | 0 | 0 |
| | System-Missing | 1 | 1 | 1 |

The cases are unweighted.

## Estimated Distribution

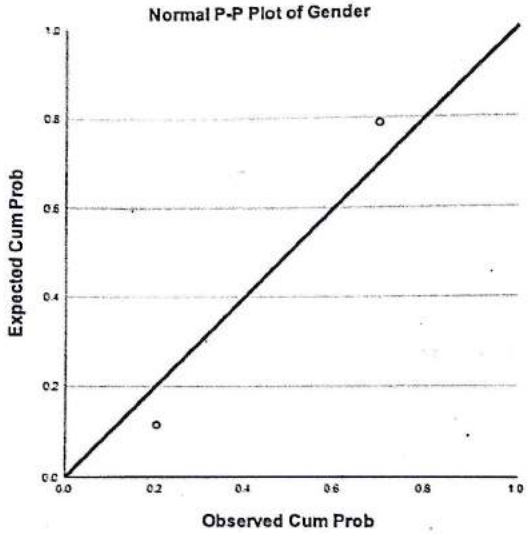
DEPARTMENT CHEMICAL ENGG. IST
Indore Institute of Science and Technology IQAC INDORE
Indore Institute of Science & Technology INDORE

## Parameters

| | | Gender | Experience | Educationlevel |
|---|---|---|---|---|
| Normal Distribution | Location | 1.60 | 2.48 | 2.48 |
| | Scale | .500 | 1.085 | 1.085 |

The cases are unweighted.

## Gender




Indore Institute of Science & Technology IQAC INDORE

DEPARTMENT CHEMICAL ENGG. IIST

Indore Institute of Science & Technology INDORE

**Indore Institute of Science & Technology, Indore**

**Department of Chemical Engineering**

**Event Summary**

Department of Chemical Engineering of IIST Indore has successfully organized the certification course on the applications of data Science for chemical engineers through SPSS. Students have learnt about the coding performed through the software SPSS that are learnt in the Petrochemical Industries as well as in Chemical Industry. A total of around 30-35 students were indulged in the certification. Ms. Palak Shah have evidently shared their experiences with the students and taught them how to solve the chemical engineering problems using SPSS software and get the appropriate results.

Dr. Samatha Singh

Head CM

INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

IIST Indore Institute of Science & Technology

Affiliated to - RGPV(Bhopal) & Approved by - AICTE(New Delhi)

## Department of Chemical Engineering

# Certificate

of Completion

This is to certify that

Mr./~~Ms.~~ Azad

has successfully completed 30 hrs. Internship / Training / Workshop / Certification Course

on Applications of Data Science for chemical Engineers through SPSS

from 2nd Jan. 2023 onwards.

organized by Department of Chemical Engineering, Indore Institute of Science & Technology, Indore (M.P.)

| | | | |
|---|---|---|---|
| Ms. Palak Shah<br>Expert | Dr. Samatha Singh<br>HOD, Chem. Engg. | Dr. Keshav Patidar<br>(I/c.) Principal, IIST | Mr. Arun S. Bhatnagar<br>Director General<br>IIST-IIP-IIMR |

Indore Institute of Science & Technology ★ INDORE ★

INDORE INSTITUTE OF SCIENCE & TECHNOLOGY
Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

IIST
Indore Institute of Science & Technology

**Indore Institute of Science & Technology**
Affiliated to - RGPV(Bhopal) & Approved by - AICTE(New Delhi)

## Department of Chemical Engineering

# Certificate
of Completion

This is to certify that

Mr./Ms. Yuvraj Narnka

has successfully completed 30 hrs. Internship / Training / Workshop / Certification Course

on Applications of Data Science for chemical Engineers throughSQS

from 2nd Jan 2023 onwards.

organized by Department of Chemical Engineering, Indore Institute of Science & Technology, Indore (M.P.)

| Ms. Palak Shah | Dr. Sumatha Singh | Dr. Keshav Patidar | Mr. Arun S. Bhatnagar |
|---|---|---|---|
| Expert | HOD, Chem. Engg. | (I/c.) Principal, IIST | Director General IIST-IIP-IIMR |

IQAC Indore Institute of Science & Technology INDORE

Indore Institute of Science & Technology INDORE

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**

## Certificate Course on Prestressed Concrete Structures

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

DATE: 30/01/2023

**Approval Letter**

Department of Civil Engineering interested to conduct a Certificate course on "Prestressed Concrete Structures" for IInd year Civil Engineering students from 3rd– 11th Feb 2023. The instructor will be Poonam Bagora, Assistant Professor, Civil Engineering Department.

Kindly approve the same for conducting the activity.

**Faculty Coordinators –** Poonam Bagora
Assistant Professor
Civil Engineering Department

**HOD CE -**

**Dr. Niraj Soni**
Civil Engineering Department

IQAC

Indore Institute of Science & Technology
INDORE

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

DATE: 30/01/2023

**NOTICE**

This is to inform you that Department of Civil Engineering is going to organize Certificate course on Prestressed Concrete Structures from 3rd– 11th Feb 2023. The students of IInd year of Civil Engineering Department will have to participate actively in this course. The event will be held at Civil Department from 10.00 AM - 3.30PM. The Coordinator for the above event is Mrs. Poonam Bagora, Assistant Professor, Civil Engineering Department.

So, I invite all the students of Civil Engineering to participate in the Certification course and get advantages.

**Dr. Niraj Soni**
**H.O.D.**
**Civil Engineering Department**

IQAC

Indore Institute of Science & Technology

# Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## Certificate Course on Prestressed Concrete Structures

**Programme Objectives**

The program prepares students for professional, teaching and research careers. Emphasis is on the acquisition of knowledge concerning to analysis, design, construction, maintenance, management and performance of structural components and structures with due consideration to public governing policies and guidelines.

**Objectives of Course-**

Student will be able to:

1. Understand various types prestressed structural elements.
2. Analyze and determine loads and stresses in PSC Members
3. Apply knowledge of analytical solution in problem solving
4. Design and detailing of Prestressed structural elements.

**Course Content**

| S.No. | Topic |
|---|---|
| 1 | History of prestressed concrete |
| 2 | Practice and use of standard materials |
| 3 | Methods of prestressing concrete structures |
| 4 | Understanding of the behavior of prestressed concrete bonded and unbonded components for flexure and shear |
| 5 | Prestressing is introduced as another load on the structure ("Equivalent Load Concept") |

IQAC

Indore Institute of Science & Technology

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

**Learning Outcomes**

After successful completion of this course the student will be able to:

1. Identify various prestressed structural elements.
2. Apply analytical skills to evaluate performance of prestressed structural elements
3. Analyze prestressed structural elements with various considerations.
4. Design and detail prestressed structural elements for various loading conditions.

Indore Institute of Science & Technology IQAC INDORE

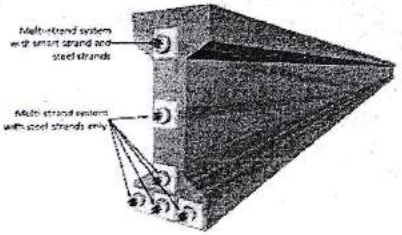
Indore Institute of Science & Technology INDORE

INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

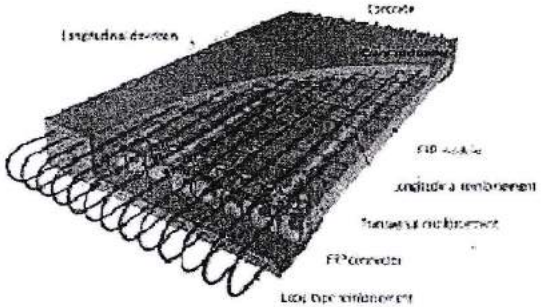
Indore Institute of Science and Technology

# DEPARTMENT OF CIVIL ENGINEERING



*Certification Course on*

# *" Prestressed Concerete Structure"*



**03rd Feb – 11th Feb, 2023**

**Duration: 10:00 AM – 04:00 PM**

**IIST, INDORE**

**Faculty Coordinator**
**Ms. Poonam Bagora**
Assistant Professor,
Civil Engineering Department,
IIST, Indore

Indore Institute of Science and Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Shear force

The necessity of high strength concrete in prestressed concrete is due to*

1 point

Shear and bonding
Loading and Unloading
Cracking
Bending

The length of the prestressed tendon between the end of the member and the point where the steel attains its stress is called*

1 point

Anchorage
De bonding
Cracking load
Transmission length

In circular prestressing members the tendons are supplied in the form of*

1 point

Cables
Bars
Wires
Rings

The prestressed concrete structures are considered as*

1 point

Economical structures
Uneconomical structures
Tensile structures
Loading structures

The prestressed concrete involves problem like _____*

1 point

Architectural and construction
Financial and land
Placing of material
Tensioning devices

Which of the following is the Indian Code used for high strength concrete mixes?*

1 point

IS 1343-1980
IS 10263-1982

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

IS 384-1980
IS 457-1979

Submit

Clear form

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

## Department of Civil Engineering

| Sno. | Enrollment Number | Student Name | Quiz Assessment |
|---|---|---|---|
| 1 | 0818CE211001 | AABID HUSSAIN DAR | PASS |
| 2 | 0818CE211002 | AANAND VISHVKARMA | PASS |
| 3 | 0818CE211003 | AAYUSH DAWAR | PASS |
| 4 | 0818CE211004 | AAYUSH LOKHANDE | PASS |
| 5 | 0818CE211005 | ABHISHEK NARGAWE | PASS |
| 6 | 0818CE211006 | AKSHAT GOUD | PASS |
| 7 | 0818CE211007 | AMAN TAYADE | PASS |
| 8 | 0818CE211009 | AVADH BIHARI PANDEY | PASS |
| 9 | 0818CE211011 | BHAVESH PANDAGRE | PASS |
| 10 | 0818CE211013 | HARDIK CHOUKSEY | PASS |
| 11 | 0818CE211014 | HARSH YADAV | PASS |
| 12 | 0818CE211015 | HEMANT SHARMA | PASS |
| 13 | 0818CE211017 | HIMANSHU MALVIYA | PASS |
| 14 | 0818CE211018 | JATIN KADAM | PASS |
| 15 | 0818CE211019 | JITURAJ AMKHARE | PASS |
| 16 | 0818CE211020 | KESHAV PATEL | PASS |
| 17 | 0818CE211023 | RAJ HANVAT | PASS |
| 18 | 0818CE211028 | ROHIT AHIRWAR | PASS |
| 19 | 0818CE211029 | SAKSHAM PARDESHI | PASS |

| | | | |
|---|---|---|---|
| 20 | 0818CE211033 | TANISHA PARWANI | PASS |
| 21 | 0818CE223D01 | S KUMAR KAUSHAL | PASS |
| 22 | | RAJU YADAV | PASS |

Indore Institute of Science & Technology
www.indoreinstitute.com

**Indore Institute of Science & Technology**

Affiliated to - RGPV(Bhopal) & Approved by - AICTE(New Delhi)

*Department of Civil Engineering*

# *Certificate*

*This is to certify that*

*Mr./Ms.* ***Aabid Hussain Dar***

*has successfully completed* ***Internship/ SIG/ Training/ Certification Course/ Workshop***

*on "* ***Prestressed Concrete Structures*** *"*

*from* ***03rd – 11th Feb, 2023*** *organized by Department of* **Civil Engineering,**

*Indore Institute of Science & Technology, Indore (M.P.)*

H.O.D. Principal Director General

**INDORE INSTITUTE OF SCIENCE & TECHNOLOGY**

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**

## Addon Course on Advance Java, Module -2 by Programming World Pvt. Ltd.

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

Date:02/02/2023

**Approval letter**

To,
The Principal
Indore Institute of Science and Technology, Indore

Subject: Proposal for 35 hours training on "Advance JAVA" from 20 Feb2023.

Respected sir,
Department of Information Technology is planning to organize a 35 hours training Advance JAVA for the students of B Tech 3rd Year (CSE, IT) from 20 Feb 2023. The expert is Mr. Pankaj Wadhwani. It is our request to kindly allow us for the same.

Yours faithfully
Ms. Praveena Joshi
Assistant Professor
Computer Science & Engineering Department
IIST Indore

HOD

Principal

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

### Department of Information Technology

Date: 02/02/2023

### Notice

All B Tech 3rd year (CSE, IT) students are hereby notified that a Training on "Advance JAVA" would be held from 20 Feb2023. The expert is Mr. Pankaj Wadhwani.
All students are required to attend the session.

Time: - 1:30 PM
Venue: - IIST

Coordinator
Ms. Praveena Joshi

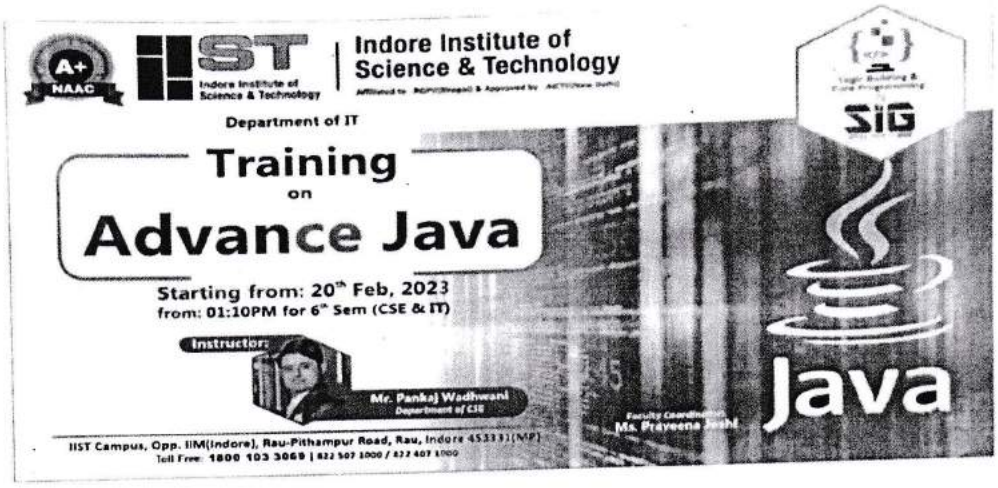
HOD

Principal

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

**NOTICE**




DEPARTMENT INFORMATION TECHNOLOGY IIST

IQAC Indore Institute of Science & Technology INDORE

Indore Institute of Science & Technology INDORE

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

**Inside / Outside Resource person detail or profile**

| Resource Person | Designation \| Company | Address |
|---|---|---|
| Mr. Pankaj Wadhwani | Director and Co-founder of "Programming World" | 182, Greater Vaishali Nagar, Indore, Madhya Pradesh 452009 |

DEPARTMENT INFORMATION TECHNOLOGY IIST

IQAC Indore Institute of Science & Technology INDORE

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

ADVANCE JAVA

**Objectives and Course Outcomes:-**

➢ **Learning Objectives**

**Course Objectives**

Upon completion of this course, students will be able to do the following:

- To learn JavaScript for creating dynamic websites.
- To acquire knowledge on creation of software components using JAVA Beans.
- To learn Server-Side Programming using Servlets and Java Server Pages.
- To learn the creation of pure Dynamic Web Application using JDBC

➢ **Course Outcomes**

**After completing this training, the student will be able to-**

- Learn the Internet Programming, using Java Applets
- Create a full set of UI widgets and other components, including windows, menus, buttons, checkboxes, text fields, scrollbars and scrolling lists, using Abstract Windowing Toolkit (AWT) & Swings
- Apply event handling on AWT and Swing components.
- Learn to access database through Java programs, using Java Data Base Connectivity (JDBC)
- Create dynamic web pages, using Servlets and JSP..

DEPARTMENT INFORMATION TECHNOLOGY IIST

IQAC INDORE

Indore Institute of Science & Technology INDORE

**Indore Institute of Science and Technology**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

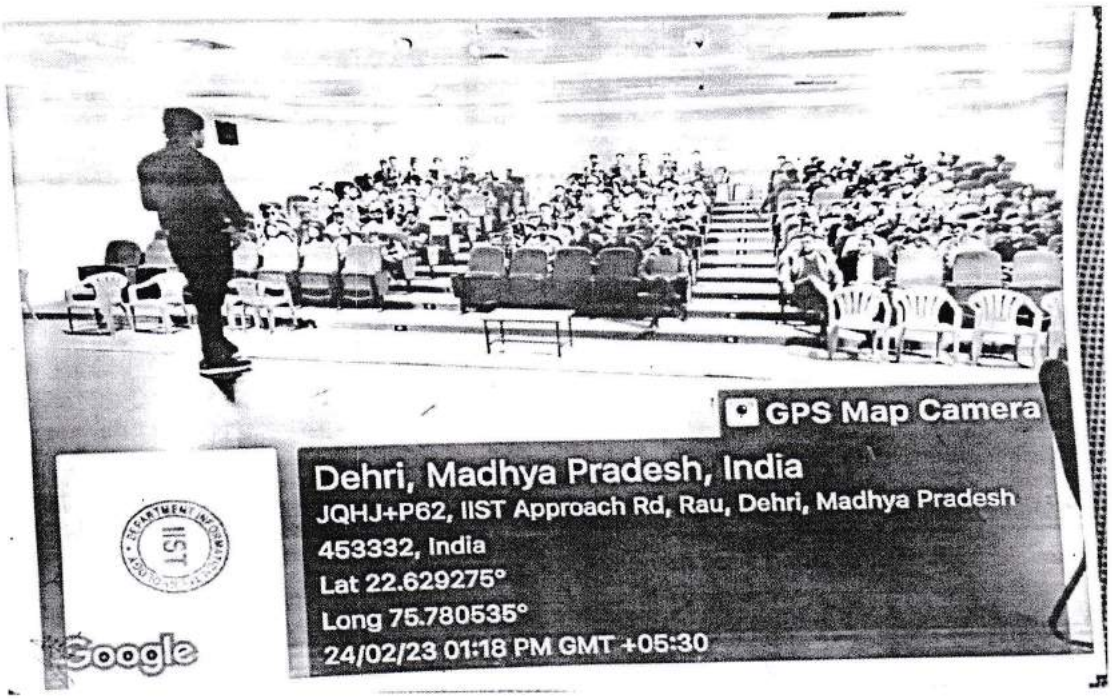
**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**
**DEPARTMENT OF CSE/IT**
**III Year - SIG ATTENDANCE(Training on Advance Java)**

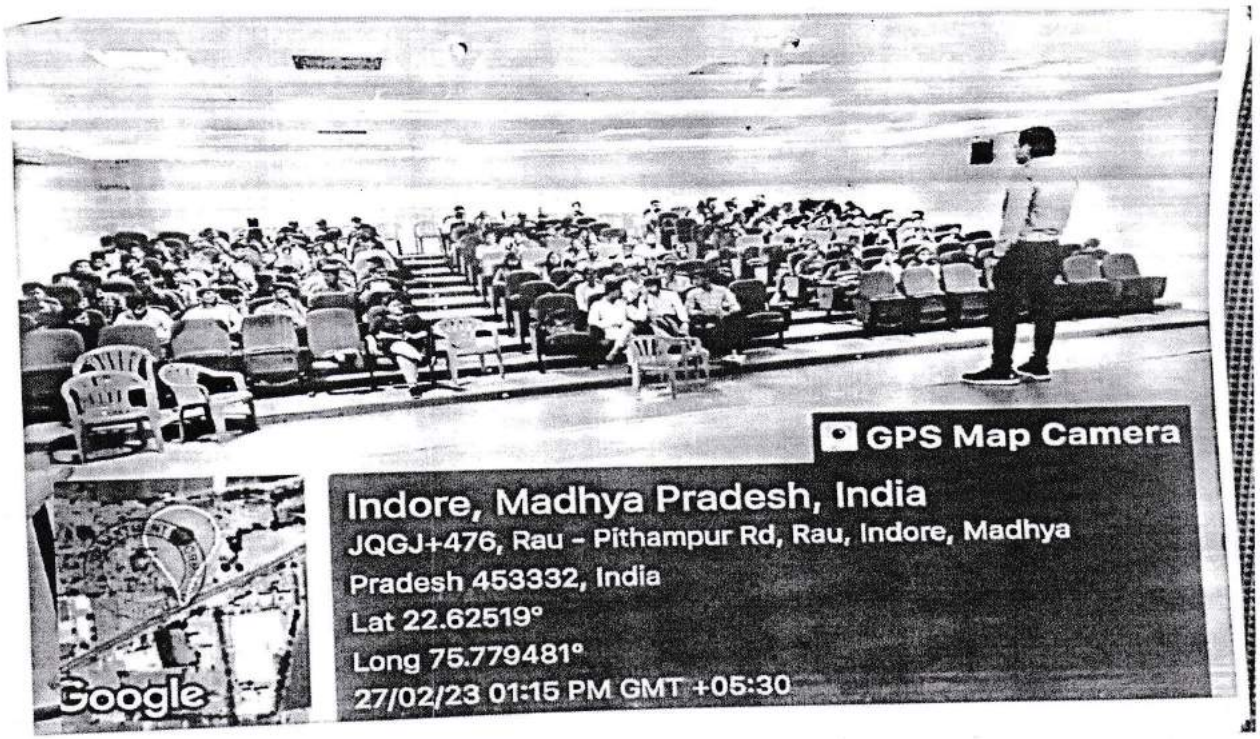
| Sno. | DATE | TOPIC COVERD |
|---|---|---|
| 1 | 23/2/23 | Introduction to HTML |
| 2 | 24/2/23 | HTML Forms |
| 3 | 27/2/23 | Introduction to Dreamweaver Tool |
| 4 | 28/02/23 | CSS - Inline, Internal and External |
| 5 | 01/03/23 | Introduction to Servlets |
| 6 | 02/03/23 | Introduction to Servers and Installation of Apache Tomcat Server |
| 7 | 15/03/23 | Creating First Servlet using Servlet Interface and XML |
| 8 | 17/03/23 | Generic Servlet and HttpServlet |
| 9 | 20/03/23 | Login Page using a Servlet |
| 10 | 21/03/23 | Session Management - Hidden Textfields, Cookies and HttpSession |
| 11 | 23/03/23 | Introduction to JSP and JSTL |
| 12 | 24/03/23 | Introduction to JSP and JSTL |
| 13 | 27/03/23 | Creationon a Web Project Using MVC Arcitecture |
| 14 | 28/03/23 | Web Project Using MVC Arcitecture |

DEPARTMENT INFORMATION TECHNOLOGY IIST

IQAC INDORE

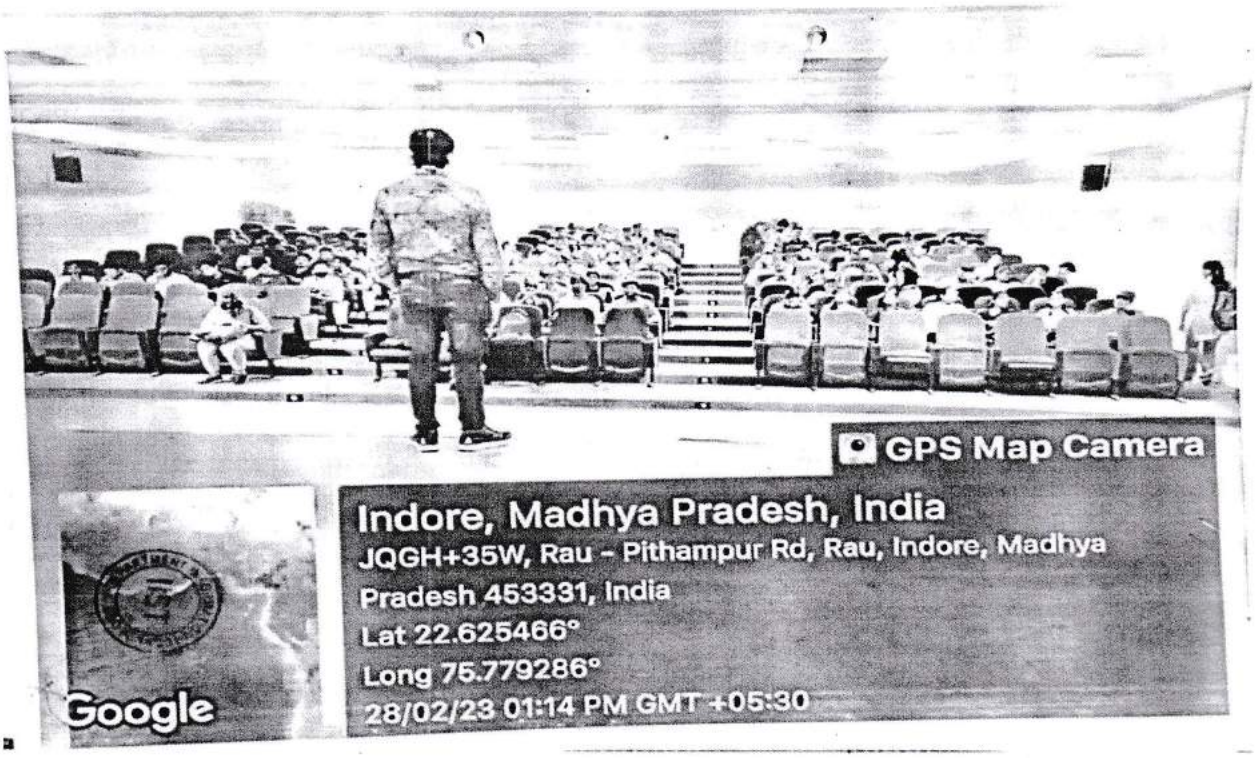
Indore Institute of Science & Technology INDORE

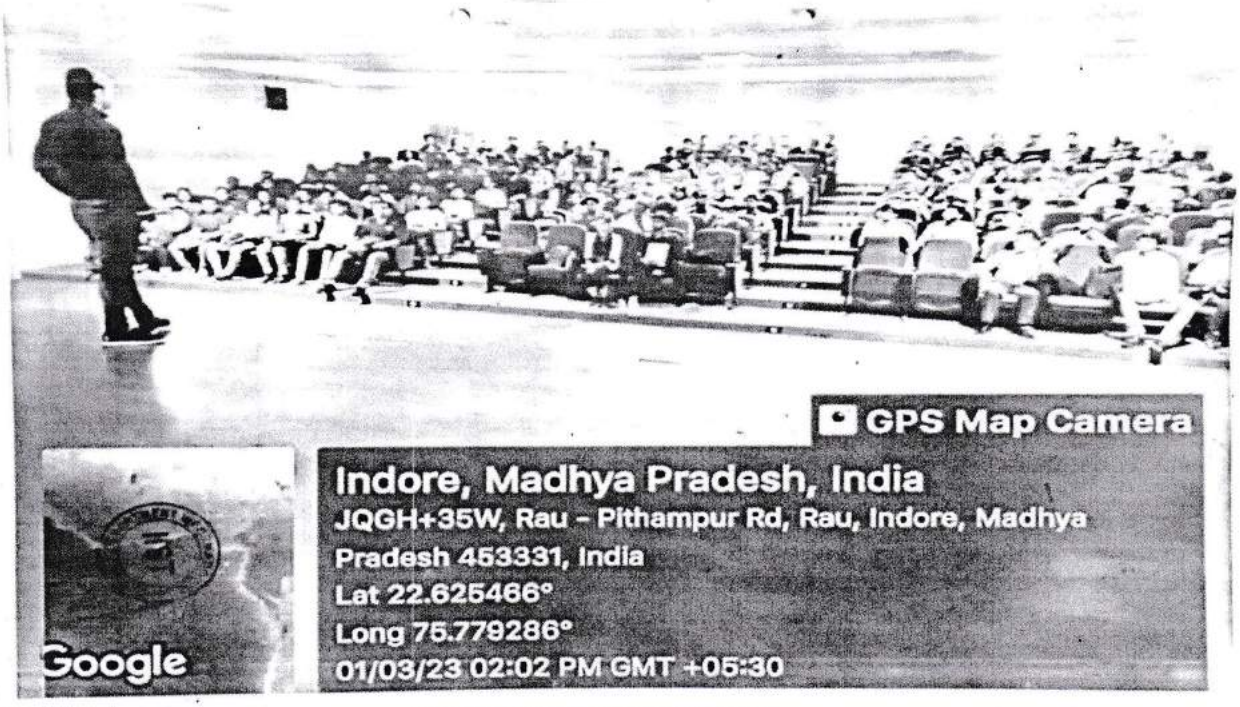



IQAC

Indore Institute of Science & Technology




IQAC

Institute of Science & Technology INDORE

## Indore Institute of Science and Technology

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

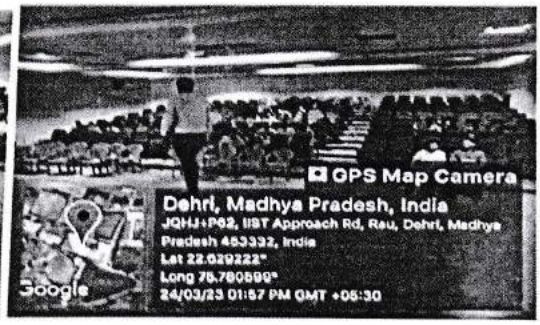
### Department of Information Technology

Summary/Report for Training
on
**"ADVANCE JAVA"**

| | |
|---|---|
| Title | Advance Java |
| Date of Event | 20 Feb-28 Mar 2023 |
| Trainer | Mr.Pankaj Wadhwani |
| Coordinator | Mrs. Praveena Joshi |

**Summary**

Information Technology department organized training program on "Advance Java". The Training has been taken by Mr. Pankaj Wadhwani He gave training on Advance Java and web Application.So students can Design and develop Web applications and make a reusable software component, using Java Bean. The technology is very demanding and has a great potential to accelerate the career of students. The main purpose of this training was to enable students to get detailed insights of JAVA with hands-on This Training was very beneficial for students looking towards the industry point of view and to make decision about their career prospect.




DEPARTMENT INFORMATION TECHNOLOGY IIST

IQAC Indore Institute of Science & Technology INDORE

Indore Institute of Science & Technology INDORE

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Certification Course on Drone Development by Om Drone Developer Pvt. Ltd.**

## Indore Institute of Science and Technology

### Event Report

Academic Year – 2022-23 Session: JAN – JUNE 2023

Name of Event: Drone Development

Date of Event: 13th to 17th March 2023

Organizing Dept.: ECE Department

Event Coordinator: Pranav Paranjpe & Mr. Shravan Namdeo

---

Name of Partner / co-organizer (If Industry is involved):

Address:

Contact No.: Email Id:

Name of Industry Representative:

Contact No.: Email Id:

---

Name of Expert/Guest: Mr. Abhay Singh Lodhi

Institute / Company: OM's Drones Developers Pvt.Ltd.

Designation: Trainer, Department: N.A.

Address: Indore

Contact No.: +91-9111451723 , Email Id: N.A.

**Details of Participants:**

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 80 | EC/ME | 1 | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD

Principal

Principal
Indore Institute of Science and Technology, Indore

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## INDORE INSTITUTE OF SCIENCE TECHNOLOGY, INDORE
### DEPARTMENT OF ELECTRONICS COMMUNICATION ENGINEERING

**CERTIFICATE COURSE ON**

## Drone Development

**FOR SESSION JAN-JUNE 2023**

| Course Details | |
|---|---|
| **Course Name** | Drone Development |
| **Eligible Students for cou** | All Engineering branches / All year |
| **Date & Time** | March 13 to 17 , 2023 and 10:00 AM onwards |
| **Mode of Internship Cum** | Offline |
| **Software download link** | NA |
| **Hardware Required** | Drone development related components |
| **If applicable play store li** | NA |
| **Pre-requisties** | No Pre-requisits |
| **Setup Required** | Computer system for computation |
| **Assessment of Course** | In the end Quiz test will be conducted |
| **Resource Person** | Mr.Abhay singh Lodhi |

### Course Objective

Quadcopter (from Quad "four" and Copter "helicopter") is an aerial robot combining a simple propeller mechanism with powerful electronics for limitless real-world applications. It is an embedded system comprising of microcontrollers, sensors, flight gear and other integrated components.

This workshop helps participants to develop a Quadcopter project from scratch while understanding the various engineering concepts in making a working Unmanned Aerial Vehicle. Developing a Quadcopter provides the right kind of hands-on application that an Engineering student needs!

### Course Outline

Build and Test your own Quadcopter
Introduction to design and development of Multi Rotor Vehicles
Understanding the Electronics circuitry involved in Quadrotor
Learn about Stability and Control of Drones
Learn about the working of sensors like Accelerometer and Gyroscopes
Hands-on experience on DC motors, ESCs (Electronic Speed Controllers) and Quadcopter Embedded control board

### Course Outcome

## INDORE INSTITUTE OF SCIENCE TECHNOLOGY, INDORE

### DEPARTMENT OF ELECTRONICS COMMUNICATION ENGINEERING

Functioning of a Quadcopter
Understanding the Electronics involved in Quadrotor
Sensors, navigation and Telemetry
Flight Trails and error rectification
Hands-on experience with DC motors, electronic speed controllers, GPS and Telemetry

**Course Content**

| Date | Topic | Resource Person |
|---|---|---|
| 13/03/2023 | About the Course<br>Introduction to Google Colab<br>Introduction to UAVs, History, classifications | Mr.Abhay Singh Lodhi |
| 14/03/2023 | Quadcopter Aerodynamics and Flight Mechanics<br>GPS and Telemetry | Mr.Abhay Singh Lodhi |
| 15/03/2023 | DC Motors, ESCs and Power Systems<br>Mission Planner Software | Mr.Abhay Singh Lodhi |
| 16/03/2023 | Planning Flight Path | Mr.Abhay Singh Lodhi |
| 17/03/2023 | Calibration and Testing of the developed Quadcopter | Mr.Abhay Singh Lodhi |

Department of Electronics & Communication Engineering
Certificate Course
DRONE
DEVELOPMENT
for all branches & year
in association with
ODD
OM'S DRONES AND DEVELOPERS PRIVATE LIMITED
Date: 13th to 17th March, 2023
Trainer:
Om's Drones Developers Pvt. Ltd.
Faculty Coordinators:
Drone Club
IIST, Indore
Scan for Registration
IQAC
INDORE
Indore Institute of Science & Technology

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

DATE:28/02/2023

# NOTICE

This is to inform you that Department of Electronics & Communication is going to organize Certificate Programme on **Drone Development** conducted by IIST EC Department from 13th to 17th March, 2023. All the students of Different Engineering Branches will have to participate actively in this event so that you will get benefits from that event. The event will be held offline from 10:30AM to 3:30PM.

**Faculty Coordinators:**

a) Mr. Pranav Paranjpe
b) Mr. Shravan Namdeo

So, I invite all the interested Students to attend/participate in the workshop and get the advantages.

**HOD ECE**

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

**Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)**

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

DATE: 18/03/2023

## Certificate Course on "Drone Development"

Department of Electronics and Communication Engineering Successfully complete Certificate course on Drone Development from 13th to 17th March, 2023 and 80 students successfully participate in the Certification programme. This programme introduces students to the amazing world of Drone system and its fascinating applications. Through this programme, students can build an Drone system device that can form the basis for smart buildings, smart irrigation systems, smart water monitoring, They can also learn how to write programs, and relate the sensed data, and use Cloud computing basis concepts with system.

**Coordinator**

# Certification Course on Advance Solid Works by Indo German Tool Room, Indore

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

## DEPARTMENT OF MECHANICAL ENGINEERING

**ACTIVITY NAME:**

**"Certificate Course on Advanced Solid Works"**

**DATE OF ACTIVITY:**

**15/05/2023 to 19/05/2023**

**ACTIVITY COORDINATOR:**

**Mr. Navdeep Jain**

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## ACTIVITY REPORT

Academic Year -2022-23 Session: **Jan-June 2023**
Name of Event: **Certificate Course**
Date of Event: 15/05/2023 to 19/05/2023 Topic: **Certificate Course on Advanced Solid Works"**
Organizing Dept.: **ME** Event Coordinator: **Mr. Navdeep Jain**

---

Name of Partner / co-organizer (If Industry is involved):MSME Technology Centre, IGTR
Address: Sanwer Road, Indore-452015 (M.P.)
Contact No.: **9584817708** Email Id: msme@igtrindore.com
Name of Industry Representative: Mr. Prakhar Joshi
Contact No.: 9584817708 Email Id: prakhar.joshi@igtrindore.com

---

Name of Expert/Guest: **Mr. Prakhar Joshi** Institute / Company:
Designation: **Trainer** Department:
Address:, IGTR Indore
Contact No.:9584817708 Email Id: prakhar.joshi@igtrindore.com
Details of Participants:

| No. of Institutes Participated | No. of Students Participated | Department | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| | | CSE/IT/EC/ME/CM/ESH | | |
| 1 | 31 | ME | 01 | NA |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD
(ME)

Principal

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## APPROVAL LETTER

Date: 01/05/2023

To,

The Principal
Indore Institute of Science and Technology
Indore

Respected sir,

Department is going to organize a Certificate Course on Advanced Solid Works from 15/05/23 – 19/05/23 at IGTR MSME Training Centre Indore for our undergraduate students, so that they have hands-on knowledge on Solid Works. The proposal for the program is attached with this application. We also request you to kindly provide necessary funding & facilities to make this program successful.

Thanking You

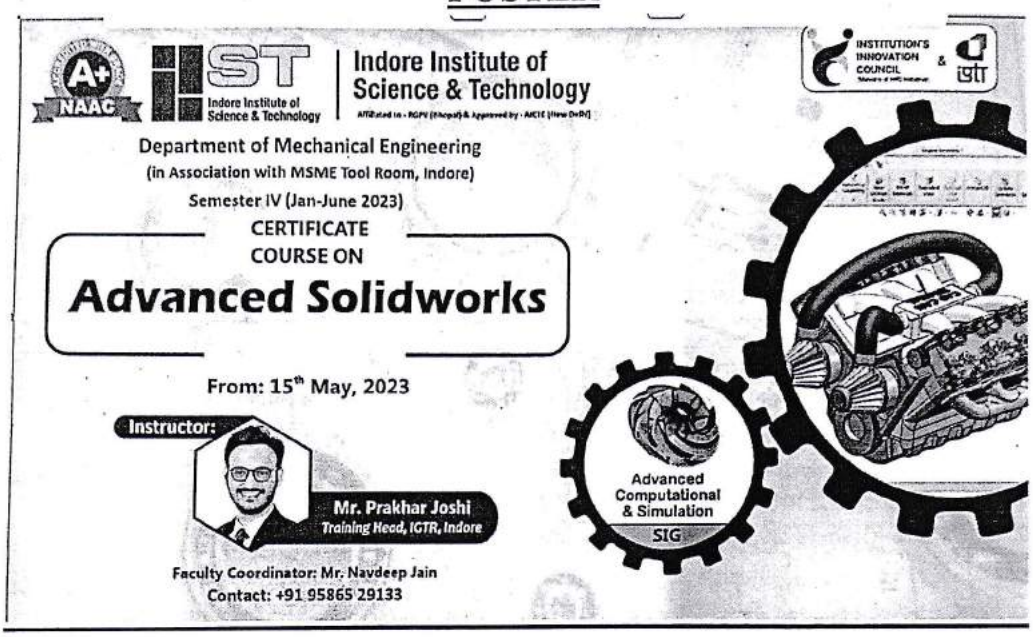
Yours faithfully
Mr. Navdeep Jain
Assistant Professor
Mechanical Engineering Department
IIST Indore

HOD
(ME)

Principal

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## POSTER



INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

| Course Content | |
|---|---|
| **Date** | **Topics** |
| 15/05/2023 | INTRODUCTION TO CAD, APPLICATION OF CAD, INTRODUCTION TO SOLIDWORKS SOLIDWORKS GUI, DIFFERENCE BETWEEN CAD,CAM & CAE |
| 16/05/2023 | SKETECHING MODE- SKETCH ENTITIES, SKETCH RELATION, SKETCH DIMENSIONS & SKETCH TOOLS |
| 17/05/2023 | INTRODUCTION TO PART MODELLING-CREATING EXTRUDE, REVOLVE, SWEPT & LOFT FEATURES, CREATING PART MODELLING FEATURES |
| 18/05/2023 | ASSEMBLY MODELLING-COMMANDS ON ASSEMBLY MODELLING, MECHANISMS INSERTING AND APPLY STANDARD MATES |
| 19/05/2023 | DRAFTING & DRAWING- ANGLE OF VIEWS, DRAWING AN ASSEMBLY ASSIGNMENT |



DEPARTMENT MECHANICAL ENGG.

IQAC INDORE

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

# OBJECTIVES & OUTCOMES

**Objectives:**

SOLIDWORKS makes it quick and simple to share designs in 2D or 3D formats, meaning you can get instant feedback and continue to work on your designs. Designs can even be shared as 3D animations, which allows you to accurately demonstrate new products and features.

**Outcomes:**

Demonstrate competency with multiple drawing and modification commands in SolidWorks.
Create three-dimensional solid models.
Create three-dimensional assemblies incorporating multiple solid models.
Apply industry standards in the preparation of technical mechanical drawings.

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

# RESOURCE PERSON PROFILE

**Mr. Prakhar Joshi**

**Mr. Prakhar Joshi** is presently working as Design Head at IGTR, Indore. He is Mechanical Engineering graduated from Rajiv Gandhi Proudyogiki Vishwavidyalaya (RGPV), Bhopal, Madhya Pradesh. He has an experience over 5 years is the field of Design and Drafting. His expertise is in CAD software as well as in CAE Softwares. He is also Corporate trainer in the field of CAD.



DEPARTMENT MECHANICAL ENGG.

IQAC

INDORE

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## CERTIFICATE

IG-A001

**MSME TECHNOLOGY CENTRE**
(INDO-GERMAN TOOL ROOM, INDORE)
Ministry of Micro, Small & Medium Enterprises
(A Govt. of India Society)

IGTR

*This is to Certify that* Certificate No. 54469

*Shri/Ms.* NIKHIL BEDI

*of* INDORE INSTITUTE OF SCIENCE & TECHNOLOGY, INDORE

*has attended and successfully completed the* CERTIFICATE COURSE

*on* SOLIDWORKS

*conducted by IGTR, Indore From* 15-05-2023 *to* 19-05-2023

Course Co-Ordinator

Date : 19-05-2023

HOD (TRG.)
Vineet Kumar Garg
H.O.D.
Training

SECTOR-E, INDUSTRIAL AREA, SANWER ROAD, INDORE - 452 015 (M.P.)



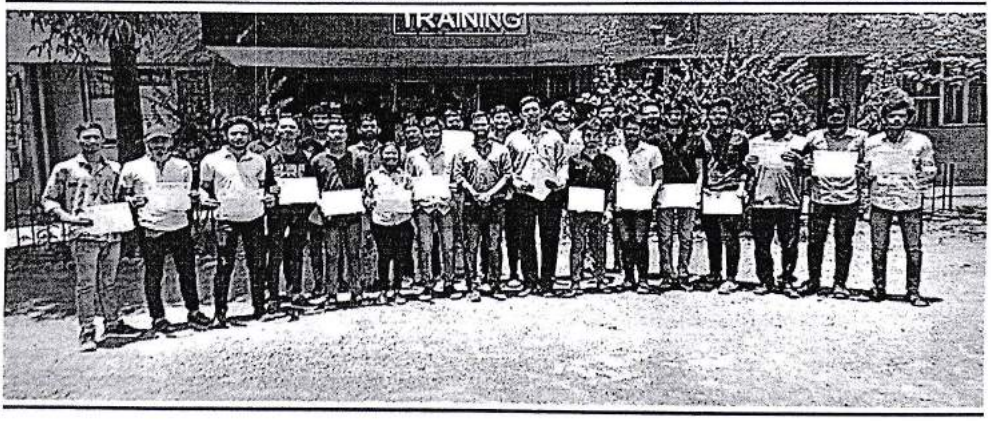
DEPARTMENT MECHANICAL ENGG.

IQAC

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

## PHOTOS






DEPARTMENT MECHANICAL ENGG.

IQAC

Indore Institute of Science & Technology

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal


## EVENT SUMMARY

A 5 day "Certificate Course on Advanced Solid Works" has been organized under Advanced Simulation & Computation SIG by Mechanical engineering department, IIST from 15/05/2022 to 19/05/2023 at IGTR, Indore. The resource Person for the Course was Mr. Prakhar Joshi. The participants were Second Year students fourth Semester Students of Mechanical Engineering Department. Total 31 students participated in the Programme. The session begins with the introductory session on CAD Software. The session ended with query solving by the expert.

The vote of thanks has been given by faculty coordinator.

Student Coordinator

Prajjwal Pal
Deepti Verma

Faculty Coordinator

Mr. Navdeep Jain
Assistant Professor
ME Dept.
IIST

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

**Certification Course on Design and Development of Drone Prototype by ORC Electronics India Private Limited**

## Indore Institute of Science and Technology

### Event Report

Academic Year – 2022-23 Session: JAN – JUNE 2023

Name of Event: Design & Development of Drone Prototype

Date of Event: 15th to 19th May 2023

Organizing Dept.: ECE Department

Event Coordinator: Pranav Paranjpe & Mr. Shravan Namdeo

---

Name of Partner / co-organizer (If Industry is involved):

Address:

Contact No.: Email Id:

Name of Industry Representative:

Contact No.: Email Id:

---

Name of Expert/Guest: Mr. Abhinav Singh Thakur

Institute / Company: ORC Electronics India Pvt. Ltd.

Designation: Trainer, Department: N.A.

Address: Jabalpur

Contact No.: +91-9630379172, Email Id: N.A.

**Details of Participants:**

| No. of Institutes Participated | No. of Students Participated | Department CSE/IT/EC/ME/CM/ESH | No. of Industry Representative | Remark if any |
|---|---|---|---|---|
| 1 | 55 | EC | 1 | |

*Please enclose a detailed list.

Also enclosed following details:

1. Approval Letter
2. Invitation card/Brochure / Leaflet (if printed by Institute or Organizing Partner) print/Social
3. Detailed summary on event. (Outcome)
4. Media Report (attach copy of newspaper)/ write-up for media/ FB write-up
5. Certificate / Letter (if printed by Institute or Organizing Partner)

HOD

Principal

Principal
Indore Institute of Science and Technology, Indore

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

NAAC A+ Accredited, ISO Certificate 9001:2015

**ELECTRONICS AND COMMUNICATION DEPARTMENT**

DATE: 04/05/2022

# Approval Letter

Drone Club interested to organize Five Days Training cum workshop on Design and Development of Drone Prototype in association with ORC Electronics India Private Limited under AICTE SPICES Scheme and MoE's Innovation Cell (IIST IIC) from 15th May to 19th May 2023.

Kindly approve for organizing the Training cum workshop in the department.

Coordinator for the Event

1. Mr. Pranav Paranjpe (Assistant Professor, ECE)
2. Mr. Shravan Namdeo (Assistant Professor, ECE)

Enclose:

1. Proposal of Training cum workshop received from ORC Electronics India Private Limited
2. Budget and Requirement.

**Coordinator Drone Club**
**IIST, Indore**

**Principal**
**Indore Institute of Science and Technology**

## INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal

NAAC A+ Accredited, ISO Certificate 9001:2015

**ELECTRONICS AND COMMUNICATION DEPARTMENT**

**Date: 04/05/2023**

## NOTE SHEET

**Training cum workshop on Design and Development of Drone Prototype and under AICTE SPICES Scheme in association with MoE's Innovation Cell (IIST IIC)**

## Budget

As per proposal received total cost for five days training cum workshop on Drone Development from ORC Electronics India Private Limited is 125000/- + GST (if applicable) plus Food and Accommodation of 2 Resource person from ORC Electronics India Private Limited.

Payment Condition will be:

1. 50% Advance & 50% against training completion.

**Enclosed:** Detailed Proposal with Account Details

## Requirements from Admin

| S. No. | Requirements | Particulars | Date | Time | Remark |
|---|---|---|---|---|---|
| Felicitation | | | | | |
| 1. | Flower Bouquet or momento or planter | 01 | 15/02/2023 | 8:45 AM | |
| Food & Refreshment | | | | | |
| 2. | Lunch for 2 Person | Regular | 15/02/2023 to 19/02/2023 | 1:00 PM | |
| 3. | Breakfast for 2 Person | Regular | 15/02/2023 to 19/02/2023 | 9:00 AM | |
| 4. | Dinner for 2 Person | Regular | 15/02/2023 to 19/02/2023 | 8:00 PM | |
| Infrastructure and IT Support | | | | | |
| 5. | White Board with Marker in Computer Lab A Block First floor MATLAB | - | 15/02/2023 to 19/02/2023 | Full day | - |

**INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY**
Approved by AICTE, New Delhi & Affiliated to RGPV, Bhopal
NAAC A+ Accredited, ISO Certificate 9001:2015
**ELECTRONICS AND COMMUNICATION DEPARTMENT**

| | | | | | |
|---|---|---|---|---|---|
| 7. | Microphone and PA system | 1 | | | |
| 8. | Slider/Pointer and HDMI to VGA converter cable | 1 | | | |
| 9. | Computer Lab with 30 System (Computer Lab A Block First floor MATLAB)<br>Operating System: Windows 7, 8 or 10 (No Linux based system)<br>RAM: 2GB and above<br>USB Port required for programming<br>Additional power sockets for robots and laptops<br>Computer with Administrator login<br>Internet Access/Wi-Fi Access | 30 System | | | |

Coordinator Drone Club
IIST, Indore

Total Cost – 125000/- + GST (if applicable)
Plus food & Accommodation of 2 Resource Person from ORC. for five days.

Principal
Indore Institute of Science and Technology, Indore

**INDORE INSTITUTE OF SCIENCE TECHNOLOGY, INDORE**
**DEPARTMENT OF ELECTRONICS COMMUNICATION ENGINEERING**

**CERTIFICATE COURSE ON**

## Design & Development of Drone Prototype

**FOR SESSION JAN-JUNE 2023**

| Course Details | |
|---|---|
| **Course Name** | Design & Development of Drone Prototype |
| **Eligible Students for course** | All Engineering branches / All year |
| **Date & Time** | May 15 to 19 , 2023 and 09:30 AM onwards |
| **Mode of Internship Cum Training** | Offline |
| **Software download link** | NA |
| **Hardware Required** | Drone development related components |
| **If applicable play store link** | NA |
| **Pre-requisties** | No Pre-requisits |
| **Setup Required** | Computer system for computation |
| **Assessment of Course** | In the end Quiz test will be conducted |
| **Resource Person** | Mr. Abhinav singh Thakur |

### Course Objective

Quadcopter (from Quad "four" and Copter "helicopter") is an aerial robot combining a simple propeller mechanism with powerful electronics for limitless real-world applications. It is an embedded system comprising of microcontrollers, sensors, flight gear and other integrated components.

### Course Outline

Build and Test your own Quadcopter
Introduction to design and development of Multi Rotor Vehicles
Understanding the Electronics circuitry involved in Quadrotor
Learn about Stability and Control of Drones
Learn about the working of sensors like Accelerometer and Gyroscopes
Hands-on experience on DC motors, ESCs (Electronic Speed Controllers) and Quadcopter Embedded control board

### Course Outcome

## INDORE INSTITUTE OF SCIENCE TECHNOLOGY, INDORE
### DEPARTMENT OF ELECTRONICS COMMUNICATION ENGINEERING

Functioning of a Quadcopter
Understanding the Electronics involved in Quadrotor
Sensors, navigation and Telemetry
Flight Trails and error rectification
Hands-on experience with DC motors, electronic speed controllers, GPS and Telemetry

**Course Content**

| Date | Topic | Resource Person |
|---|---|---|
| 15,16-05-23 | About the Course<br>Introduction to Google Colab<br>Introduction to UAVs, History, classifications<br>Quadcopter Aerodynamics and Flight Mechanics | Mr. Pranav Paranjpe |
| 17,18-05-23 | GPS and Telemetry<br>DC Motors, ESCs and Power Systems<br>Mission Planner Software | Mr. Pranav Paranjpe |
| 19-05-2023 | Calibration and Testing of the developed Quadcopter<br>Planning Flight Path | Mr. Pranav Paranjpe |

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

Indore Institute of Science & Technology

Affiliated to - RGPV(Bhopal) & Approved by - AICTE(New Delhi)

AICTE - SPICES

Department of Electronics & Communication Engineering

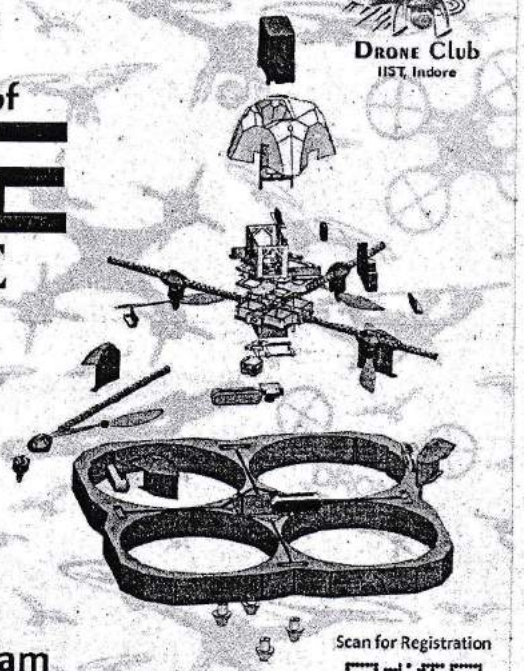
## Certificate Course

Design & Development of

# DRONE PROTOTYPE

for all branches & year

Drone Club
IIST, Indore



in association with

ORC Electronics India Pvt. Ltd.

Date: 15th to 19th May, 2023

**Trainer:**

**Mr. Abhinav S. Thakur & Team**

Director, ORC Electronics India Pvt. Ltd.

**Faculty Coordinators:**

Mr. Pranav Paranjpe | Mr. Shravan Namdeo

Scan for Registration

45 seats on
First come first basis

IIST Campus, Opp. IIM(Indore), Rau-Pithampur Road, Rau, Indore 453331(MP)
Toll Free: 1800 103 3069 | 822 507 1000 / 822 407 1000

IQAC

INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

DATE:10/05/2023

# NOTICE

This is to inform you that Department of Electronics & Communication is going to organize Certificate Programme on **Design & Development Drone Prototype** conducted by IIST EC Department from 15th to 19th May, 2023. All the students of Different Engineering Branches will have to participate actively in this event so that you will get benefits from that event. The event will be held offline from 09:30AM to 3:30PM.

**Faculty Coordinators:**

a) Mr. Pranav Paranjpe
b) Mr. Shravan Namdeo

So, I invite all the interested Students to attend/participate in the workshop and get the advantages.

**HOD ECE**

# INDORE INSTITUTE OF SCIENCE & TECHNOLOGY

Approved by AICTE, New Delhi, Affiliated to RGPV, Bhopal, Recognized by UGC under Section 2(f)

## INDORE INSTITUTE OF SCIENCE & TECHNOLOGY,INDORE

**Department of Electronics & Communication Engineering**

NAAC A+ Graded

# FEEDBACK FORM

**Personal Information**

| | |
|---|---|
| Name (Optional) | Sanjana Sen |
| Class (Year / Semester) | ECE All year |
| Topic | Certificate course on Design & Development of DRONE PROTOTYPE |
| Date | 15th-19th May 2023 |

1. The presenter/lecturer/trainer/facilitator(s) was/were knowledgeable
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
2. The presenter/lecturer/trainer/facilitator(s) was/were well-prepared
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
3. The content of the workshop/training/industrial visit was useful.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
4. The content of the workshop/training/industrial visit/course was well-planned.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
5. The knowledge and skills I acquired from the workshop/training/industrial visit/course are of relevance to my work/are applicable to many aspects of my work.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
6. Broadly educated and will have an understanding of ethical responsibility.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
7. Clearly understanding the value of updating their professional knowledge to engage in life -long learning.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
8. Demonstrate the ability to apply advanced technologies to solve contemporary and new problems.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
9. The workshop/training/industrial visit/course has met the stated objectives fully.
   • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**
10. what rating would you like to rate for the Event
    • **Very Satisfied** ○ **Satisfied** ○ **Good** ○ **Average** ○ **No Answer**

SIGNATURE

Indore Institute of Science & Technology IQAC INDORE

Indore Institute of Science & Technology INDORE

Indore Institute of Science & Technology IQAC INDORE

INDORE INSTITUTE OF SCIENCE AND TECHNOLOGY

DATE: 23/05/23

## Certificate Course on "Drone Development"

Department of Electronics and Communication Engineering Successfully completed Certificate course on Design & Development of Drone Prototype from 15th to 19th May, 2023 and 55 students successfully participate in the Certification programme. This programme introduces students to the amazing world of Drone prototyping and its fascinating applications. Through this programme, students can build an Drone system device that can form the basis for smart agriculture, smart irrigation systems, smart water monitoring, They can also learn how to write programs, and relate the sensed data, and use Cloud computing basis concepts with system.

**Coordinator**