

INFORMATION BROCHURE

2022-2023

for admission to

6th Batch of Industrial Training on Software Development



Division of Communications and Information Technology

इन्द्रप्रस्थ सूचना विज्ञान संस्थान दिल्ली

Indraprastha Institute of Information Sciences Delhi

Jamia Nagar, New Delhi-110025, India

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1. About IIS Delhi

The Indraprastha Institute of Information Sciences Delhi (IIS Delhi) is a unit of Indraprastha Institute of Information Sciences Private Limited (IIS Private Limited), New Delhi, India. The IIS Private Limited is registered by *Ministry of Corporate Affairs, Government of India*. The objective of the institute is to provide the Post-Doctoral Training to the Ph.D. graduates and Industrial Training / Research Training for those who are pursuing M.Tech. / B.Tech./ MCA / BCA / BSc / MSc / Diploma Engineering in the area of Computer Engineering, Information Technology, Electronics Engineering, and Electrical Engineering. Students who are working at the intersection of Information Sciences and Civil Engineering / Mechanical Engineering/ Management Science can also join the Postdoctoral and Industrial / Research Training at IIS Delhi. There are four divisions and an Indraprastha Research Laboratory in IIS Delhi: (1) Division of Research and Development, (2) Division of Communications and Information Technology, (3) Division of Electrical and Electronics Engineering, and (4) Division of Interdisciplinary Sciences. Currently, Division of Communications and Information Technology, IIS Delhi, is running Four / Six / Eight Week Internship / Industrial Training on (1) Software Development and (2) Artificial Intelligence. In future, we shall start the industrial training on Embedded Systems, VLSI Design, and Software Testing.

A **Patent** was published by the members of the **Indraprastha Research Laboratory**, IIS Delhi in **September 2022** in **Indian Patent Journal** on the topic entitled “A System for Eliciting the Ranking Order of Large Set of Requirements under Fuzzy Environment for the Development of Secure Software” as a collaborative research work with the academicians and researchers of Jamia Millia Islamia, New Delhi; Jamia Hamdard, New Delhi; Mewat Engineering College Nuh, Haryana; and Mangalayatan University Aligarh, Uttar Pradesh.

One of the research papers of the research team members of the **Indraprastha Research Laboratory**, IIS Delhi, has been published in 3rd **International Conference on Innovations in Computational Intelligence on Computer Vision**, Springer, 2022, Organized by Manipal University, Jaipur.

The students of M.Tech./B. Tech./BCA/Diploma Engineering of the following institutions/universities have successfully attended/completed the 4/6/8-week industrial training/internship on software development from IIS Delhi:



2. Important Dates

Last date for the submission of application for the Fifth Batch of Training and short-term courses is **June 10, 2023**. Interested candidates can submit their application at info@iiisc.in. The classes of the selected candidates of the sixth Batch of Industrial Training on Software Development will start from **June 12, 2023**.

3. Syllabus

The Industrial Training of 4/6/8 week on **Software Development** is exclusively designed for those who are studying in B. Tech. / M.Tech. / BCA / MCA / BSc Computer Science/MSc Computer Science/ Diploma courses; and wants to work in Software Industry in future. The course structure of these two training programmes is given below:

3.1 Internship / Industrial Training on Software Development

The Industrial Training on Software Development (ITSD) trains the students with the knowledge and skills to understand basics of software development with main emphasis on software requirements elicitation and analysis using UML tools, prioritization of requirements using fuzzy based multi-criteria decision-making methods (AHP/TOPSIS), and development. The course structure of ITSD is given in Table 1.

Table 1: Course structure of ITSD

S. No.	Code No	Title of the Course	Module	Weeks
1	ITSD-101 (T)	Elements of Software Development	1	I Week
2	ITSD-102 (T)	Fuzzy Logic and Its Applications in Software Development	2	II Week
3	ITSD-111 (P)	Case Study and Implementation	3	III-IV Week (*)
4	ITSD-112 (P)	Software Requirements Implementation	4	V-VI Week (**) VII-VIII (***)

- *Only for four-week training, ** only for six-week training, *** only for eight-week training

ITSD-101(T): Elements of Software Development

The objective of this course is to introduce the software development process to the students.

At the end of this course, students will be able to understand the following:

1. Reasons of software failure
2. Detection of discordances among the stakeholders of software
3. Basics of software development life cycle
4. Methods for software requirements elicitation
5. Visualization of software requirements using AND/OR graph
6. Understanding of the software security requirements and its importance during the software development process

Course Contents:

Introduction to Software and Program, Software development life cycle models: Waterfall model, Iterative model, Spiral model; Introduction to agile methods; Software requirements (SRs) elicitation techniques: Traditional methods, Package-oriented method, Goal-oriented methods (AND/OR graph); SRs Analysis using UML models: Class diagram, Use-case diagram, Activity diagram; Security requirements elicitation: Method for the identification of security and threats.

ITSD-102 (T): Fuzzy Logic and its Application in Software Development

The objective of this course is to introduce the basic concepts of soft computing with main emphasis on fuzzy logic to the students. At the end of this course, students will be able to understand the following:

1. Difference between crisp logic and fuzzy logic
2. How to model the linguistic terms using different types of the fuzzy numbers like triangular fuzzy numbers, trapezoidal fuzzy numbers, etc.
3. How to apply the fuzzy based decision-making methods for the selection of software requirements during the development of software?

Course Contents:

Computing: Hard computing and Soft Computing, Different components of soft computing; Different sources of uncertainty: Randomness and vagueness; Fuzzy logic, Membership functions, main features of a fuzzy set membership functions, i.e., core, support, and boundary; Difference between crisp set and fuzzy set; Some numerical examples; Normal fuzzy set, subnormal fuzzy set, convex fuzzy set, etc.; types of fuzzy numbers. Operations on fuzzy sets: Cartesian product, Max-min composition on fuzzy relations; Types of fuzzy numbers: Triangular fuzzy number, Trapezoidal fuzzy number, Operations on fuzzy numbers, Methods for fuzzification and defuzzification; Multi-criteria decision making (MCDM) methods: Analytic Hierarchy Process (AHP), Technique for Order of Preference by Similarity to Ideal Solutions (TOPSIS), Test Cases Writing: Black box and White box testing; Selection of programming languages according to the need of the requirements.

ITSD-111 (P): Case Study

The objective of this course is to understand the case study process by considering an information system. The students will select an information system and will identify the requirements for the analysis using UML models then they will apply the fuzzy based MCDM methods. At the end of this course, students will be able to understand the following:

1. How to analyse the existing documents related to an information system?
2. How to elicit the SRs using AND/OR graph?
3. How to analyse the SRs using UML models?
4. How to select the SRs using fuzzy based MCDM methods?

Course Contents:

Modeling of SRs using star UML tool, Construction of an AND/OR graph for SRs; Elicitation of complete set of SRs; Analysis of the SRs using Use-Case and Misuse-Case diagrams; Detection of conflicts among requirements using preference matrix; Applications of fuzzy AHP and TOPSIS in real world

ITSD-112 (P): Software Requirements Implementation

The objective of this course is to implement the software requirements using some of the selected language like C/C++/HTML-CSS/PHP/Python, etc. At the end of this course, students will be able to understand the following:

1. Selection of one programming language according to the need of the requirements:

C/C++/Java /HTML-CSS/PHP/Python

Note: There will be a critical analysis on the selection of programming language with the subject experts

2. Implementation of at-least one software requirement of an information system using the selected language

Note: Students will apply the fuzzy based MCDM method for the selection of top n requirements of an information system. Students will implement the top 1 and 2 requirements of an information system under the guidance of the subject experts.

3. Generation of test cases of the implemented requirements using:

Black box testing/White box testing/Hybrid testing

Note: After the implementation there will be a discussion on how to present our work/results in a training report.

3.2 Internship / Industrial Training on Artificial Intelligence

The Industrial Training on Artificial Intelligence (ITAI) trains the students with the data and skills to understand basics of Artificial Intelligence (AI) with main emphasis on problem solving using AI, Logical agents, First-order logic, Inference in first order logic, and soft computing techniques. The course is divided into four modules. There are two theory courses (ITAI-101 and ITAI-102) and two practical courses (ITAI-111 and ITAI-112) in this training programme. These courses have been designed after consultation with the experts from academia and industry so that students can understand how AI can be applied for solving some real-world problems. The course structure of ITAI is given in Table 2.

Table 2: Course Contents of ITAI

S. No.	Code No	Title of the Course	Module	Weeks
1	ITAI-101 (T)	Introduction to Artificial Intelligence	1	I Week
2	ITAI-102 (T)	Soft Computing Techniques	2	II Week
3	ITAI-111 (P)	Project (Solving Problems using AI)	3	III-IV Week (*) /V-VI Week (**)/and VII-VIII Week (***)

- *Only for four-week training, ** only for six-week training, *** only for eight-week training

ITAI-101 (T): Introduction to Artificial Intelligence

The aim of this course is to introduce AI to the students so that can understand how AI is used for solving the real-world problems. AT the end of this course students will be able to understand the following:

1. What is Artificial Intelligence (AI)
2. Applications of AI
3. Intelligent agents
4. Solving problem by searching
5. First order logic
6. Inference in first order logic
7. Resolution

Course Contents:

Definition of AI, Foundations of AI, History of AI, Agents and environments, the structure of agents; Solving problems by searching: problem solving agents, Toy problems, real world problem; Searching for solutions, Uninformed search techniques: breadth-first search, uniform cost search, Depth first search, Iterative deepening depth first search, Heuristic search techniques: A* algorithm, Local search algorithms and Optimization problems: Hill climbing search algorithms; First order logic: Syntax and semantics of first order logic, Using first order logic; Inference in first order logic: Propositional vs First order inference, Forward chaining and backward chaining, and resolution.

ITAI-101 (T): Soft Computing Techniques

The objective of this course is to discuss various soft computing techniques with main emphasis on Fuzzy set theory, Rough-set theory, Genetic algorithm, Neural Networks. At the end of the course students will be able to understand the following:

1. Need of soft computing techniques
2. How multivalued logic is different from crisp logic?
3. Various fuzzy based multicriteria decision making methods
4. Difference between fuzzy set and rough-set theory
5. How genetic algorithm works?
6. Neural networks and its applications

Course Contents:

Introduction to soft computing, Different components of soft computing: Fuzzy Logic, Genetic Algorithm, Rough-set theory, and Neural network, Different sources of uncertainty: Randomness and vagueness; Fuzzy logic, Membership functions, main features of a fuzzy set membership functions, i.e., core, support, and boundary; Difference between crisp set and fuzzy set; Some numerical examples; Normal fuzzy set, subnormal fuzzy set, convex fuzzy set, etc.; types of fuzzy numbers. Operations on fuzzy sets: Cartesian product, Max-min composition on fuzzy relations; Types of fuzzy numbers: Triangular fuzzy number, Trapezoidal fuzzy number, Operations on fuzzy numbers, Methods for fuzzification and defuzzification; Multi-criteria decision making (MCDM) methods: Analytic Hierarchy Process (AHP), Technique for Order of Preference by Similarity to Ideal Solutions (TOPSIS); Genetic Algorithm (GA): procedure for solving a problem using GA; Introduction to Neural network and its applications.

ITAI-101 (P): Project (Solving Problems using AI)

The objective of this course is applying the knowledge of AI for solving some real-world problems in the following domains: Software applications, Health Care, Natural Language Processing, Social Network Analysis, etc. The students will work on the above domains as a part of their project and will submit the report after the completion of the project within time.

3.3 Three Months Short Term Course on Software Development and Artificial Intelligence

The objective of the short-term course on Software Development and Artificial Intelligence (SDAI) is to discuss the basics of software development process which includes software requirements elicitation, modeling of software requirements using UML and goal-oriented techniques, selection of software requirements using fuzzy based multicriteria decision making methods like fuzzy AHP and fuzzy TOPSIS. The course structure includes the following: ITSD-101 (T), ITSD-102 (T), ITAI-101 (T), ITAI-102 (T), and STC -101 (T) and it is shown in Table 3.

Table 3: Course Contents of Short-Term Course on SDAI

S. No.	Code No	Title of the Course	Module	Weeks
1	ITSD-101 (T)	Elements of Software Development	1	I and II Week
2	ITAI-101 (T)	Introduction to Artificial Intelligence	2	III and IV Week
3	ITAI-102 (T)	Soft Computing Techniques	3	V and VI Week
4	STC-101 (T)	Software Testing	4	VII and VIII Week
5	STC-111(P)	Case study/Project Work	5	IX and XII Week

STC -101 (T): Software Testing

The aim of this course is to discuss various software testing techniques and generate test cases according to the software requirements. At the end of the course students will be able to understand the following:

1. What is software testing?
2. Testing Terminologies
3. Difference between black-box testing and white box testing
4. Understanding of various testing techniques
5. Generation of test cases

Course Contents:

Introduction to Software Testing, Testing principles, terminologies, Types of testing techniques: Black-box testing and White-box testing; Generating test cases using boundary

value analysis, robustness testing, Cyclomatic analysis, Control-Flow graph, etc., Applying testing techniques for generating the test cases for the software requirements of an information system

4. Fee Structure

The training and short-term fee structure is shown in Table 4. 50% waiver of fee is awarded to those who are the first, second, and third position holders of their classes. For bulk registrations of the students from the same Institute/University, see Table 5.

Table 4: Fees and payments for various training programmes

S. No.	Name of the training programme	Duration	Registration Charges	Tuition Fee	Total amount
1.	Internship / Industrial Training on Software Development (Online Mode)	4-8 Week	INR 1000	1750	INR 2750
2.	Internship / Industrial Training on Software Development (Offline Mode)	4-8 Week	INR 1000	6500	INR 7500

Table 5: For bulk registrations from the same Institute / University

S. No.	Name of the training programme	Duration	Number of students	Total amount
1.	Internship / Industrial Training on Software Development (Online Mode)	4-8 Week	5-10	INR 2,500/- per student
			11-20	INR 2,250/- per student
			21-40	INR 2,000/- per student
			>40	INR 1,750/- per student
2.	Internship / Industrial Training on Software Development (Offline Mode)	4-8 Week	10-20	INR 6,000/- per student
			20-40	INR 5,500/- per student

Last updated on May 29, 2023

5. Training Statistics

5.1 Batch First of ITSD: June 20, 2022 to July 29, 2022

The Division of Communications and Information Technology, IIIS Delhi, organized a Six-Week Industrial Training on Software Development (ITSD) during **June 20, 2022 to July 29, 2022**. Er. Tabassum Bano, Director of IIIS Private Limited, warmly welcomed all the

participants, guests, and keynote speakers from across the country. She briefly introduced the course contents of the training programme of the first batch of Six-Week ITSD. The keynote speakers of the inaugural function were **Prof. Chaudhary Wali Mohammad**, *Ph.D., AMU Aligarh*, Professor and Ex-Head, Department of Applied Sciences and Humanities, Jamia Millia Islamia, A Central University, New Delhi; **Dr. Vikram Singh**, *Ph.D. NIT Kurukshetra*, Assistant Professor, Department of Computer Engineering, National Institute of Technology Kurukshetra, Haryana; **Prof. Farooq Husain**, *Ph.D. AMU Aligarh*, Director, Shivdan Singh Institute of Technology and Management Aligarh, Uttar Pradesh; **Dr. Javed Ahmad**, *Ph.D. JMI, New Delhi*, Assistant Professor, Jamia Hamdard, New Delhi; and **Prof. Virat Raj Saxena**, *M.Tech. AMU Aligarh*, Assistant Professor, Department of Computer Engineering, Accurate Institute of Management and Technology, Greater Noida, Uttar Pradesh. In the valedictory function, which was scheduled on August 4, 2022 from 6:30 P.M., the students of the first batch presented their work. Guest of Honour of the valedictory session was **Dr. Mohd. Sadiq**, *Ph.D. NIT Kurukshetra and Postdoc IISc Bangalore*, Assistant Professor and Head, Jamia Millia Islamia, A Central University, New Delhi. He delivered an expert lecture on the Selection of Software Requirements using Fuzzy Logic. He also pointed out that there is enough research on Software Requirements Selection and Prioritization in India and it is not a part of academic curriculum till date and he suggested to focus more on this topic in the training programmes. The course and students' statistics of Batch-1 of ITSD is given in Fig. 1 and Fig. 2., respectively.

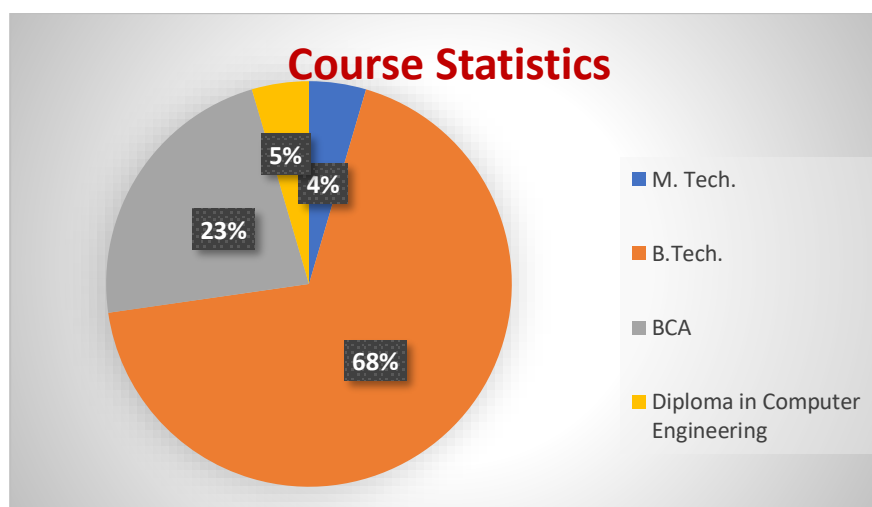


Fig. 1: Course Statistics of First Batch of ITSD

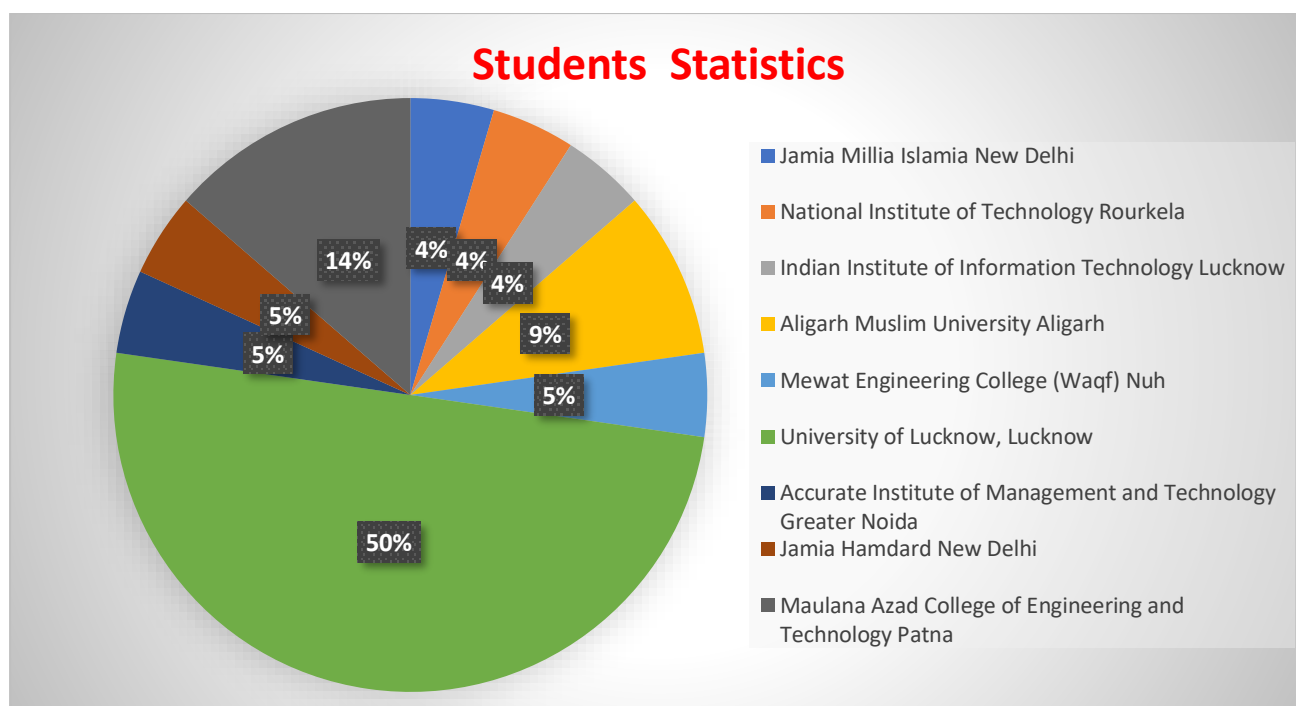


Fig. 2: Students Statistics of First Batch of ITSD

5.2 Batch Second of ITSD: **Group 1: September 19, 2022 to October 14, 2022 and Group 2: September 19, 2022 to November 25, 2022**

The second batch of ITSD was started from September 19, 2022 with 16 students of four-week ITSD and 9 students of ten-week ITSD. The course coordinator and Director of IIIS Delhi, Er. Tabassum Bano, welcomed all the students of 4-week and ten-week ITSD. She briefly discussed the course contents of the training programme. The valedictory function of four-week ITSD was scheduled on November 12, 2022 in which 16 students presented their work that they have completed during the training. The Guest of Honour of the valedictory function was **Dr. Kamlesh Rana**, *Ph.D. IIT (ISM) Dhanbad*, Director, Bharat Institute of Technology, Meerut, Uttar Pradesh. The keynote speaker of this function was **Er. Mohd. Sulaiman**, *M.E., BITS Pilani*, Software Analyst, Bank of America, who evaluated the training projects of the students of (a) MJP Rohilkhand University Bareilly, (b) Khwaja Moinuddin Chisti Language University Lucknow, (c) University of Lucknow, Lucknow, and (d) Jamia Millia Islamia, A Central University, New Delhi. He discussed the importance of software development and its training with main emphasis on Mainframe Batch/Online Applications. The valedictory function of ten-week ITSD was scheduled on December 24, 2022. **Prof. Virat Raj Saxena**, *M.Tech. AMU Aligarh*, Department of Computer Science and Engineering/ML

and AI, Raj Kumar Goyal Institute of Technology, Ghaziabad, was the Guest of Honour and Expert for the evaluation of the training reports of the students of Motihari College of Engineering, Motihari, Bihar. During the evaluation, he motivated the students to publish their work in an International Conference or Journal. The course and students' statistics of Batch-2 of ITSD is given in Fig. 3 and Fig. 4., respectively.

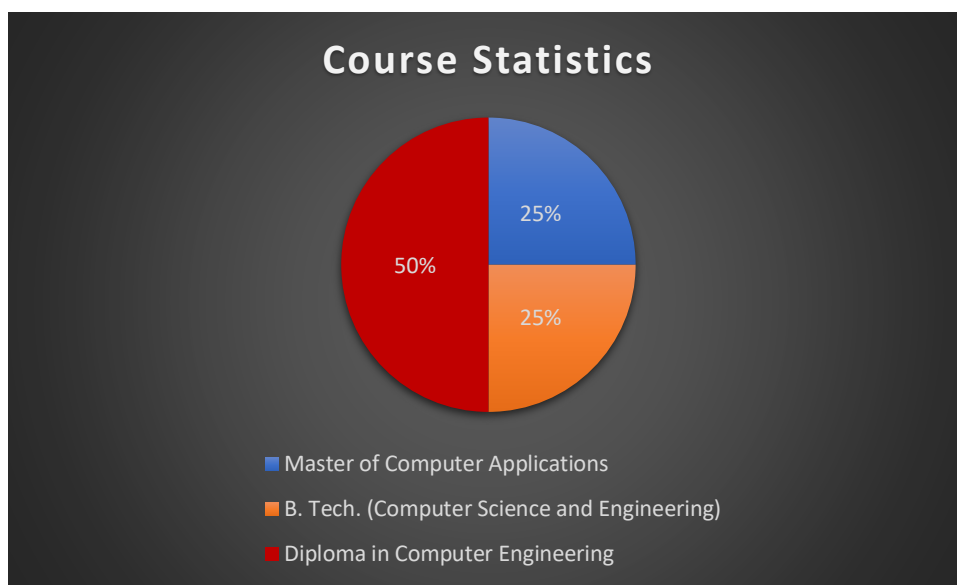


Fig. 3: Course Statistics of Second Batch of ITSD

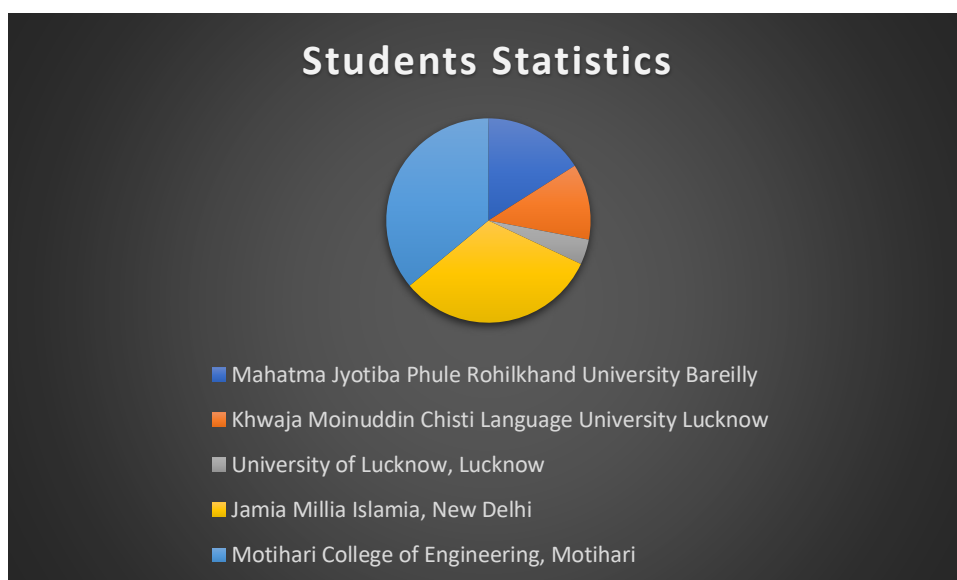


Fig. 4: Students Statistics of Second Batch of ITSD

During the training programme, few expert lectures were delivered by those who have good experience in software development, see Fig. 5 and Fig. 6.

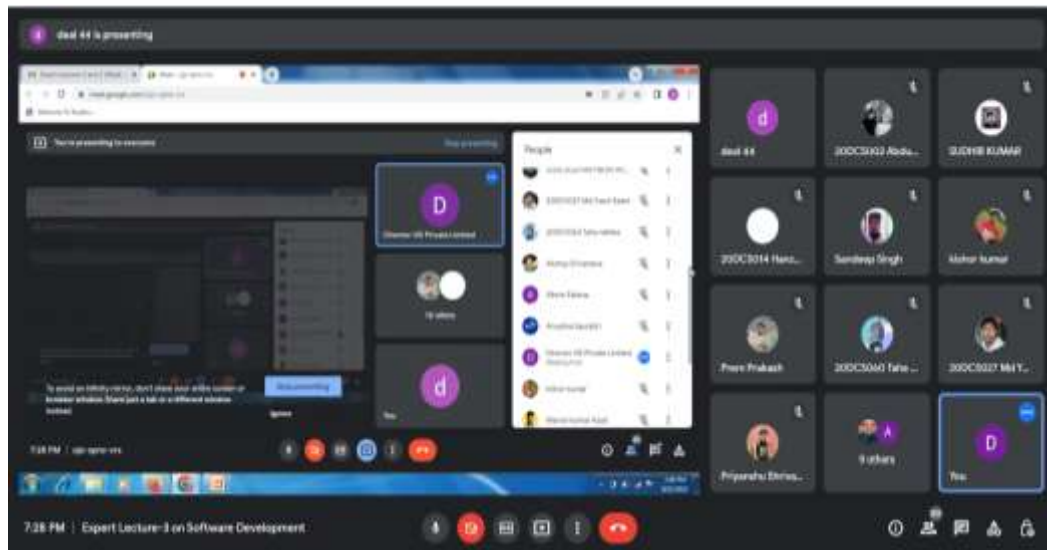


Fig. 5: Expert Lectures on Software Development-Second Batch

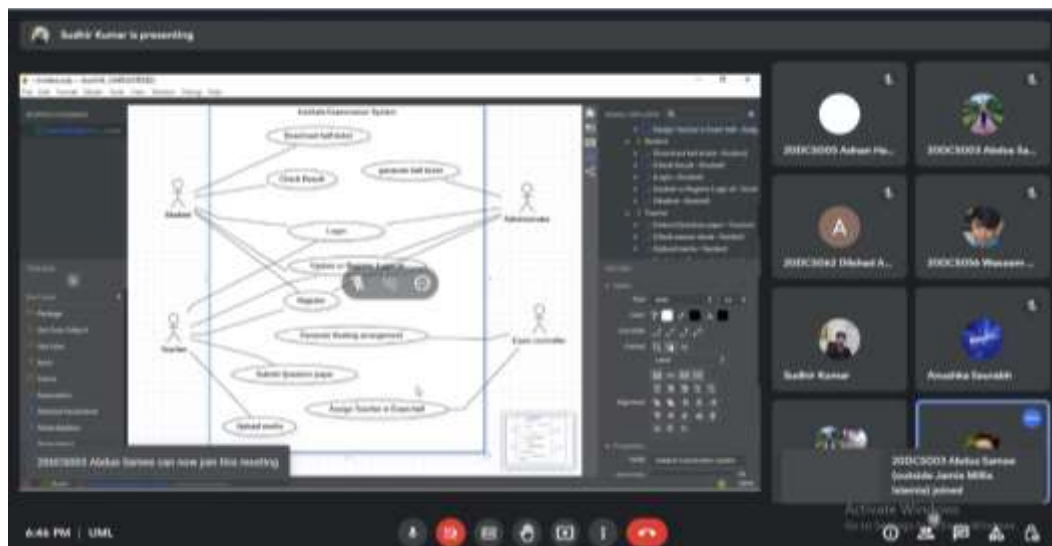


Fig. 6: Discussion on Training Projects with Experts-Second Batch

5.3 Batch Third of ITSD: October 31, 2022 to November 25, 2022

The third batch of ITSD was started from October 31, 2022. One of the directors of IIS Delhi, Er. Tabassum Bano, welcomed all the participants and discussed the course of the training. The valedictory function of this batch was scheduled on January 7, 2023. The chief guest and the expert of this valedictory function was **Mr. Tanveer Hassan**, Ph.D. Scholar, Jamia Millia Islamia, A Central University, New Delhi. He evaluated the training reports of all the participants and motivated the students to work more on stakeholders' identification and

their modeling of an information system. The course and students' statistics of Batch-3 of ITSD is given in Fig. 7 and Fig. 8., respectively.

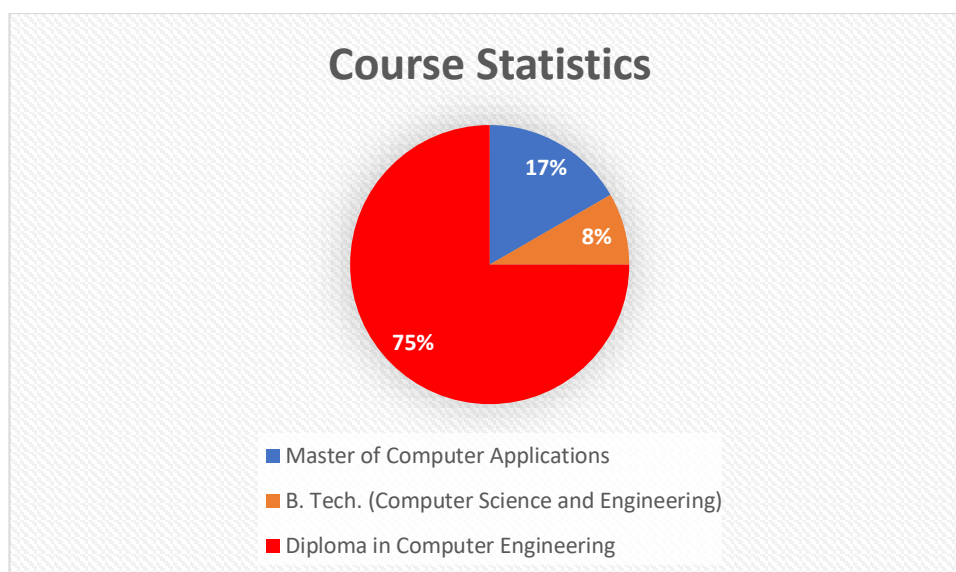


Fig. 7: Course Statistics of Third Batch of ITSD

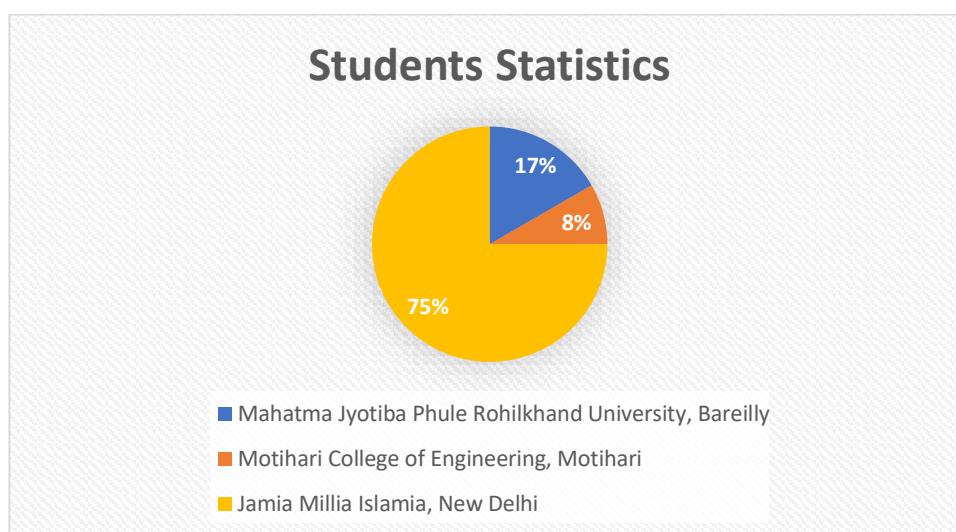


Fig. 8: Students Statistics of Third Batch of ITSD

5.4 Batch Fourth of ITSD: December 5, 2022 to January 27, 2023

The fourth batch of ITSD was started from December 5, 2022. Er. Tabassum Bano, Director of IIIS Delhi, welcomed all the participants and the keynote speaker. She also discussed about the course contents and the schedule of the training programme. **Prof. Suman Rani, M. Tech. MDU Rohtak**, Assistant Professor, Department of Computer Science and Engineering, B.S.

Anangpuria Institute of Technology and Management, Faridabad, Haryana, was the keynote speaker of the inaugural function of fourth batch of ITSD. In her lecture, she focused on various software requirements elicitation techniques, see Fig. 9.

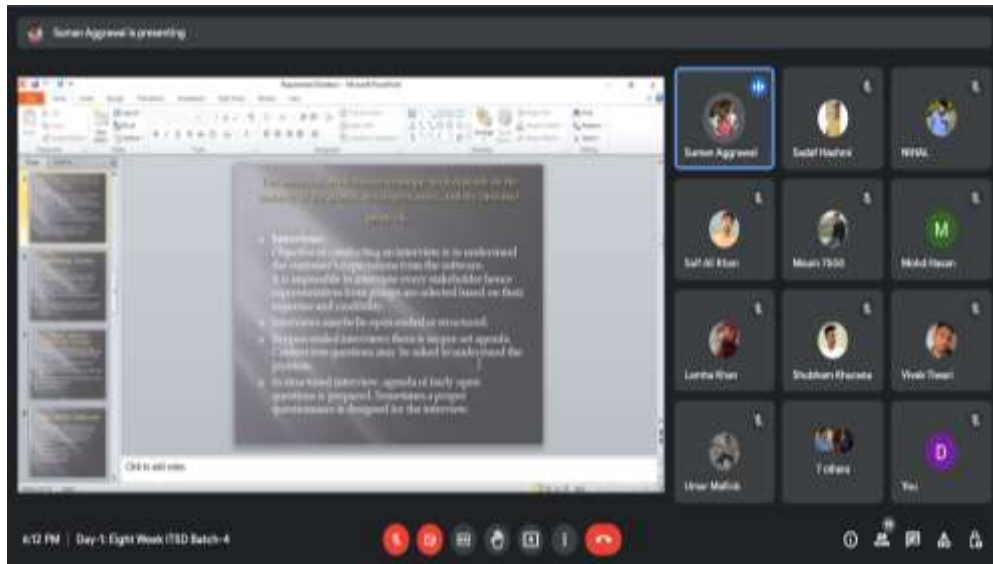


Fig. 9: Inaugural Function of Fourth Batch of ITSD

The course and students' statistics of Batch-4 of ITSD is given in Fig. 10 and Fig. 11., respectively.

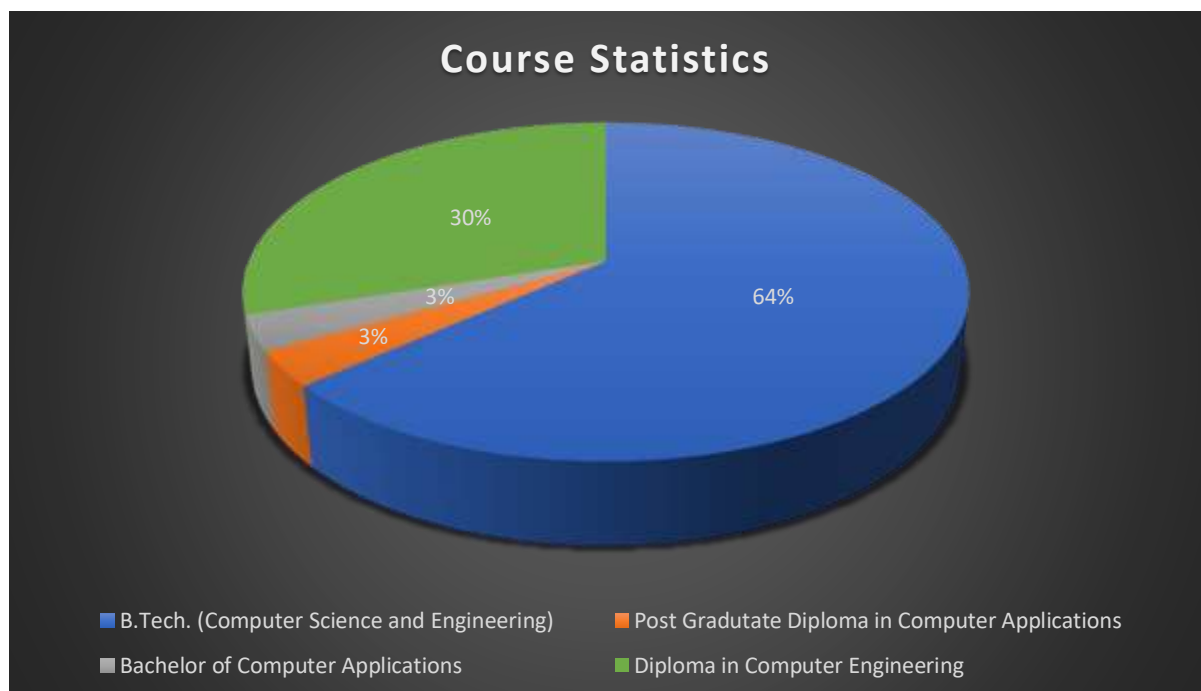


Fig. 10: Course Statistics of Fourth Batch of ITSD

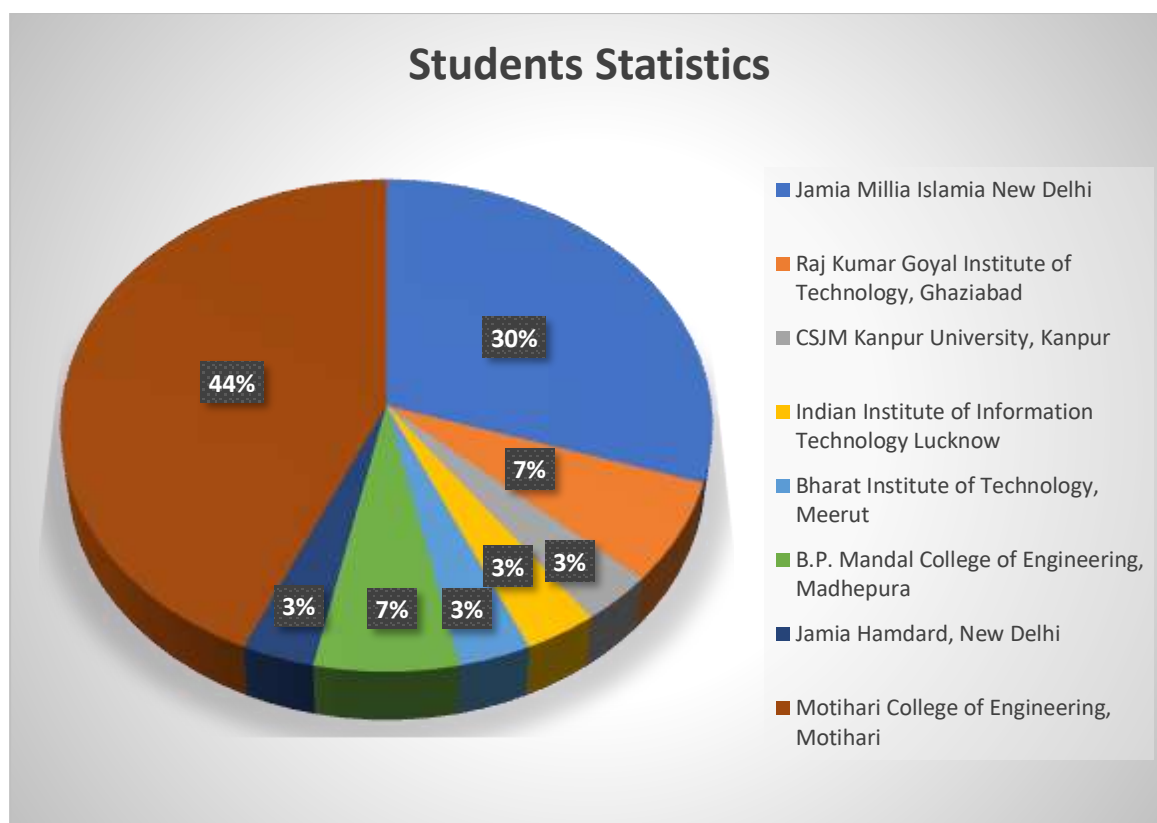


Fig. 11: Students Statistics of Fourth Batch of ITSD

5.5 Batch Fifth of ITSD: February 20, 2023 to April 14, 2023

The fifth batch of ITSD was started on February 20, 2022. Dr. Azra Parveen, Director, IIS Delhi, welcomed all participants and discussed the course contents of the training. The valedictory function of this batch was scheduled on May 27, 2023. The chief guest and the expert of this valedictory function was **Dr. Amit Mishra**, *M.Tech. IIIT Allahabad and Ph.D. NIT Kurukshetra, India*, who is working as an Assistant Professor (Senior Grade) in the Department of Computer Science and Engineering and Information Technology, Jaypee Institute of Information Technology, Noida, Uttar Pradesh. Dr. Mishra examined the training students of IIS Delhi and motivated the students to apply the knowledge of Natural Language Processing so that need of the requirements can be identified from the requirements document. The students' statistics of Batch 5 of ITSD is exhibited in Fig. 12.

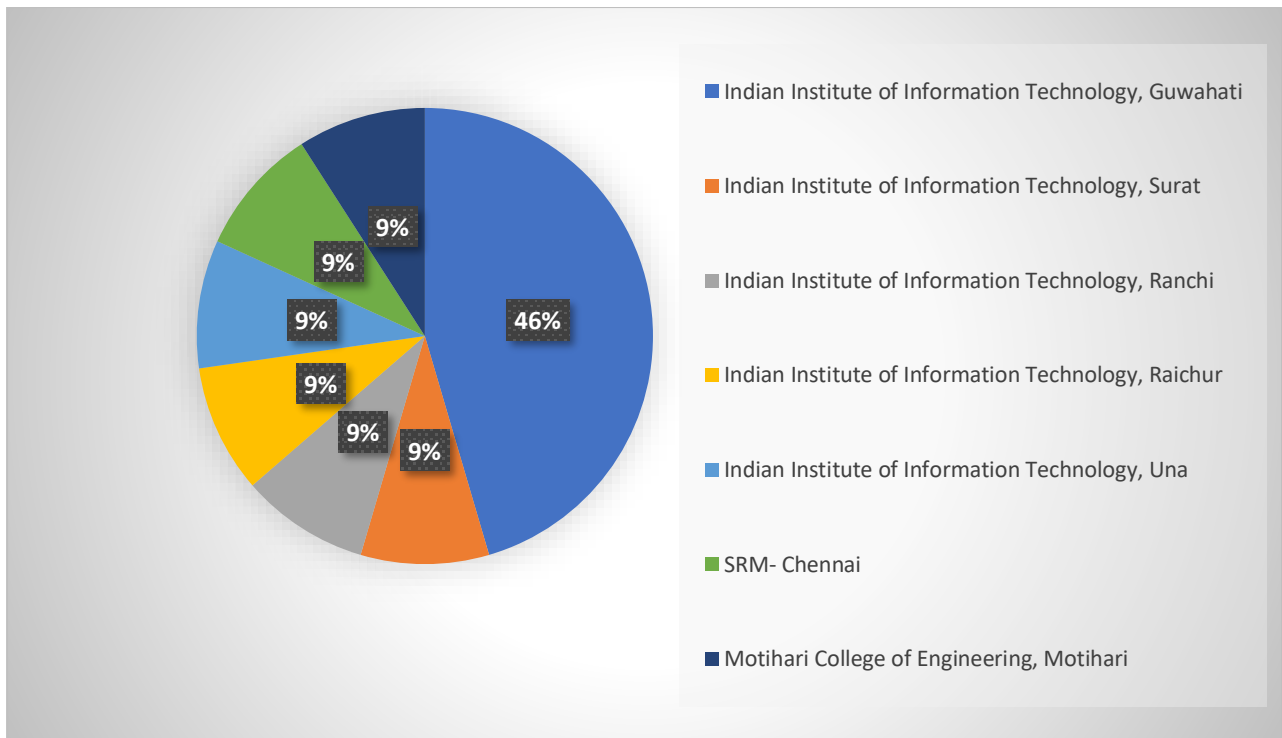


Fig. 12: Students Statistics of Fifth Batch of ITSD

6. Testimonials

What our students say about the training programme?



I am happy that I have joined the first batch of **Six Week Industrial Training on Software Development** at IIS Delhi. The course contents of the training programme were taught by *expert faculties*, who have good research experience in software development. It helps me to learn lots of things related to software development, that are not even available in the books. It provides research environment and very supportive to think something out of the box. Get to learn about how actually software engineering applied in corporates. Working on research papers and to learn how to analyse them and extract something meaningful was new to me. It was very interesting experience, full of excitement, and knowledge. During the training, I worked on the project entitled, **A Tool for the Detection of Discordances Among Stakeholders During Software Development**.

Omkar Singh Raghav

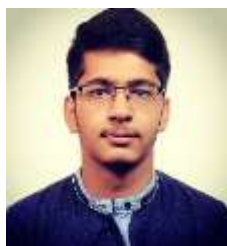
B. Tech. Computer Engineering-IV Year, 2019-2023 Batch
Aligarh Muslim University, Aligarh, U.P, India



It was a good experience for beginning software development as an intern in the **Six Week Industrial Training on Software Development** at Indraprastha Institute of Information Sciences (IIS) Delhi. During the training period, I learned various methods for the identification of the software requirements and the modeling of the requirements using UML. In addition to this, the fuzzy logic was also discussed to deal with the vagueness and imprecision during the selection and prioritization of software requirements. During the training, I worked on the research-oriented project, i.e., **Eliciting the Ranking Order of Requirements of an Online Examination System using Fuzzy TOPSIS Method**.

Md. Rumman Haider

M. Tech. Mining Engineering-II Year, 2021-2023 Batch
National Institute of Technology Rourkela, Odisha, India



The **Six-Week Industrial Training on Software Development** at IIS Delhi has given me the opportunity to interact with more than 30 students who were from various institutes like NIT Rourkela, AMU Aligarh, JMI New Delhi, University of Lucknow, Lucknow, and many more. This training program helped me in brushing up the software development life cycle theory and learn how things are implemented practically rather than learning bookish concepts. We also learned how we can contribute towards the research papers in this domain. As a first batch student, I have got the opportunity to work on the project entitled "**Attributed Goal Oriented Requirements Analysis Method**."

Anukool

B.Tech. Computer Science and Engineering-III Year: 2020-2024 Batch
Indian Institute of Information Technology Lucknow, Uttar Pradesh, India



The training programme was very good. I have learned a lot of new things related to the software development. I am happy that I have got the chance to explore software engineering as an intern during the **Six Week Industrial Training on Software Development** at Indraprastha Institute of Information Sciences Delhi. The teachers were very supportive during the classes. I have got the opportunity to work on the project which was an essential component to successfully complete the training. I worked on the project, i.e., **Software Requirements Elicitation and Modeling of an Online Admission Management System**.

Vishal Awasthi

B. Tech. Computer Science and Engineering-IV Year, 2019-2023 Batch
University of Lucknow, Lucknow, Uttar Pradesh, India



It was one of the best learning experiences that I had at the Indraprastha Institute of Information Sciences Delhi. The training was completely based on industrial projects. The classes were very interactive and enhance my knowledge in the field of software development. The prior knowledge of mathematics and coding helped me to complete my project, i.e., **“Eliciting the Ranking Order of Requirements of an Online Training System using Fuzzy TOPSIS Method”**. Overall environment of this institution is very friendly and they always help the students. I would say that I am very much happy that I have completed my **Six Week Industrial Training on Software Development** (first batch) from IIS Delhi.

Mohd Saquib

B. Tech. Mechanical Engineering-IV Year, 2019-2023 Batch
Aligarh Muslim University, Aligarh, Uttar Pradesh, India



IIS Delhi has provided me with a plethora of opportunities to understand basics of Software Development after the completion of my Diploma in Computer Engineering in 2022 from Jamia Millia Islamia, New Delhi. This **Six Week Industrial Training on Software Development** was very effective to both Computer Engineering and non-Computer Engineering students. Even non-Computer Engineering students also learn in a very fast and effective manner. One of the features of this training programme was that it uses research-oriented methodology in which most of the contents were discussed using research articles. There was a systematic discussion on the progress of the project as per the convenience of the students. During the training, I worked on the project entitled **“Software Requirements Elicitation and Modeling of an Online Examination System.”**

Adarsh Kumar

Diploma in Computer Engineering-2022 Batch
Jamia Millia Islamia, A Central University, New Delhi, India (NIRF ranking 3 in 2022)



The **Four Week Industrial Training on Software Development** of Batch-2 at IIS Delhi has given me the opportunity to interact with those resource persons who have good knowledge of software development and research. This training has moulded me in the best way possible and made me feel confident in facing any issue related to software development process. The interaction with the resource persons and participants helped me to understand how to elicit and modeled the requirements of an information system. I worked on the project entitled **Software Requirements Elicitation and Modeling of Movie Ticket Booking System.**

Sandeep Kumar

MCA-II Year-2020-2023 Batch
Mahatma Jyotiba Phule Rohilkhand University Bareilly, Uttar Pradesh, India



I honestly enjoyed the **Four-Week Industrial Training Program on Software Development** of Batch-2 at IIS Delhi. The course contents were well planned and it was easy to follow. The work load was just enough that I finished it within time. I would like to say that everyone has enjoyed the training program because all the lectures, assignment, and tests were straightforward. I worked on the project entitled **Software Requirements Elicitation and Modeling of E-Library Management System.**

Jiya Singh

B.Tech. Computer Science and Engineering, IV Year-2019-2023 Batch
Khwaja Moinuddin Chisti Language University Lucknow, Uttar Pradesh, India



The **Ten Week Industrial Training on Software Development** of Batch-2 at IIS Delhi has given me the chance to explore different areas of software development processes like software requirements elicitation, UML models, Fuzzy Logic, and implementation of requirements. One of the best parts of the training was the systematic approach to complete the training projects in which we have developed a tool for computing the ranking order of the requirements of an information system. The resource persons were very knowledgeable who discussed the contents of the training in the light of the research papers which have been published in SCI / Scopus indexed journals.

Sudhir Kumar

B. Tech. IV Year 2019-2023 Batch

Motihari College of Engineering, Motihari, Bihar, India



The **Four Week Industrial Training on Software Development** of Batch-2 at IIS Delhi really helped me get the exposure of software engineering like what it takes to build a system from scratch. Prior to this, I used to think, it is all about coding but it is not true. The training introduced to me the processes for building any software before the implementation stage and how much significance it holds in the software development process. The processes of requirements engineering, reasons for the failures of any software, resolution of conflict among stakeholders regarding requirements, security requirements of a software specifically and many more concepts were taught with the real-world examples. We all had to work on a system and implement whatever we learned which reinforced our learning. I really appreciate the effort put by the IIS Delhi for this training programme.

Md. Yusuf Azam

Diploma in Computer Engineering-III Year, 2020-2023 Batch

Jamia Millia Islamia, A Central University, New Delhi (NIRF ranking 3 in 2022)



I am happy to have been part of the Batch-5th of an **Eight-Week Training Program on Software Development** at IIS Delhi. The teachers were experts in their field and had lots of experience doing research in software development. The course covered many topics that are not usually found in books mostly based on real life scenarios. It was a great environment for research, and we were encouraged to think of new and exciting ideas. The best part of the training was learning how software development is used in real companies. Working on research papers was also new and exciting for me, and I learned how to find important information in them. I gained lots of new knowledge and skills during the program. During the training, I worked on a project called "Modelling of Food Delivery System using UML and Goal Oriented Approach." This project gave me a chance to practice what I had learned during the program.

Overall, the training program was a very positive and helpful experience, and I am thankful to IIISD for giving me this chance to learn and improve.

Vemula Murali Sai Praharsa

B.Tech. in Computer Science and Engineering-II Year, 2021-2025 Batch

Indian Institute of Information Technology Guwahati



I really enjoyed the training program as an intern of the Batch- 5th of **Eight-Week Training Program on Software Development** at IIS Delhi. The training was knowledgeable and engaging. I learned a lot of new things that I can apply in my future work. I was impressed with the quality of the training programme and the expertise of the trainees. I excited to put my new skills to solve some real-world problems. Overall, the training programme was a great experience. I am very grateful for the opportunity provided by the IIS Delhi. I would be happy to attend the other training programmes in future offered by the IIS Delhi.

Manish Kumar

B.Tech. in Computer Science and Engineering-III Year, 2020-2024 Batch

Indian Institute of Information Technology Raichur