

MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH & STUDIES
(Deemed to be University)

TRAINING DIARY

SCHOOL OF ENGINEERING & TECHNOLOGY



INDUSTRIAL TRAINING

Jun 2025

STUDENT

Name: Diwakar Rawat

Roll No.: 1/22/FET/BCS/081 **Branch:** CSE **Semester:** 7th

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Training Period From: 16-June-2025 To: 17-August-2025

INDUSTRY / ORGANIZATION

Name: Codec Technologies

Address: Jodhpur Gam Road, Ahmedabad, Gujarat 380015

Website: <https://codectechnologies.in/> **E-mail :** support@codectechnologies.in

MESSAGE

The Industrial Training is an important part of engineering education. It provides the essential practical edge to the concepts assimilated by the students in classrooms and labs. It enables the students to discover the connections between the academic theory and real-life practice. The industrial training basically aims to widen the student's perspective to real world of work life in organizational and environmental situations. It provides an exposure to a real-life environment dealing with product development, manufacturing processes, management, and culture and communication structure. The organization, also in turn benefits from the unbiased and objective prospective the students provide based on the skills and concepts imbibed in them at the institution level. It also provides a link to explore and pursue future job / project opportunities.

The main objective is to correlate courses of study with the way Multinational Companies, Industries, Corporate world and other potential work place operate their work or business using latest technology. The students during their training period should work on implementing what has been learnt in the institution and are required to expose themselves to the various aspects like organization structure, business ethics, quality control, material and men management, designing and fabrication, interface technology etc.

By undergoing industrial training, students are provided with experience that will make them stronger and confident in their abilities. Industrial Training will also allow students to learn about time management, discipline, and effective communication skills. In the business world, critical thinking skills are very important. With that exposure, graduates start making quick decisions which are based on logical thinking. Moreover, it will teach students how to excel in a large number of different organizations and industries.

The students of B.Tech. at Manav Rachna International Institute of Research & Studies (Deemed to be University) have to undergo 4 weeks Industrial Training as a partial fulfillment of getting Bachelor's Degree in Technology. During the 4-week Industrial training, both the student and organization can understand each other as sufficient time period is available, so live projects can be undertaken by the students. Hence it is beneficial for both the student as well as industry.

All the students are advised to assimilate maximum knowledge and skill during this 4-week industrial training to enable them to place better in the present competitive job market.

**Prof. (Dr.) Pardeep Kumar
PVC & Dean, SET**

MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH & STUDIES

(Deemed to be University)

SCHOOL OF ENGINEERING & TECHNOLOGY

Industrial Training Jun, 2025

General guidelines for Industrial Training

1. Every student will have to undergo Industrial Training for 4 weeks in the relevant field of Engineering in which he/she is enrolled for B.Tech programme after 6th semester. Respective Head of Department will approve the Industry/Organization for training. During this course of time he/she will be regularly monitored and evaluated. At the end, the student will have to submit the training report, deliver a seminar about the work/project undertaken during the training and will have to appear for viva.
2. Training letter being collected from department is to be submitted to the industry for getting confirmation letter from industry where he/she wants to under go industrial training and the consent letter from organization regarding 4 weeks industrial training is to be submitted to the respective HODs for further necessary approval.
3. The student is required to collect the Joining Report and Evaluation/Feedback Report Proformas from department. The Joining Report is required to be filled-in and sent to department /HOD within a week after joining the organization for training. The Evaluation/Feedback Report is to be got filled by your Guide and Competent Authority of the Organization, which will evaluate his/her training on different aspects. The duly filled-in sealed Evaluation/Feedback Report in original, training report (2 copies) and this diary are required to be deposited in department / HOD after completion of training.
4. During training, keep daily records of your observations, discussions in this DIARY. Write on ruled pages. Plain pages are included for making sketches.
5. Try to learn in depth through discussions at various levels and note about technicalities, organizational structure, plant layout, production processes, quality systems, and special techniques being employed in each department in which you undergo the training.
6. Reflect your learning, during training in the Institute, through projects in the industry, in the Report you will be submitting after Training. Try to achieve best grades during evaluation of Training that will be conducted in the Institute.
7. Look smart, meaningfully busy and serious on training. Create a job for you.
8. Keep in touch with Department/Career Planning Division through periodic reports.
9. The students will have to submit the training report, deliver a seminar about the work/project undertaken during the training and will have to appear for viva.

The evaluation of the industrial training shall be made as per following:

Continuous Evaluation during training:

1. Evaluation by the Supervisor in the Industry	:	50 marks
2. Evaluation by Faculty Mentor during training visit	:	20 marks
3. Internal seminar/ Presentation	:	30 marks
Total Marks	:	100

End Term Evaluation after training:

1. Project Report	:	20 marks
2. Seminar/Presentation	:	40 marks
3. Viva	:	40 marks
Total marks	:	100
Total Credits	:	2

Diary Writing

- Daily observations and discussions should be recorded with date, which will be helpful in writing training report.
- Diary contents should be written with the sufficient details. It is a diary as well a notebook.
- Pertinent data should be recorded and sketches should be drawn on plain sheet provided for the purpose.
- Diary contents will be useful during professional career and thus should be written and preserved.

Writing training Report

1. Front Page :

Report of Industrial Training: Undergone at

.....
.....

During Jun, 2025

Name Roll No.

Dept..... Semester

- Index pagefor contents.
- Acknowledgement
- Introduction.....Training programme,
Project
- About organization – background, activities,
- Training Details – chapter wise.

2. Report should be based on individual's observations, data collected, analysis done, project made, etc and summarized in own language. Report based on photocopy of company's history and brochures will not be considered as training report.

Practical Training Programme

WEEKLY PROGRESS

Training records to be written everyday in this diary during training.

After completing training in a department/section, meet the Departmental/Sectional Head to clarify your queries.

Write brief about the work undertaken by you in the organization/industry on weekly basis and get the signature of Departmental/Sectional Head on the space indicated below.

1st Week

Name of Department/Section:

Period From 16-June-2025 To 22-June-2025

Brief report by the student trainee about the work undertaken/done during this week:

- Understood the MERN stack structure and set up the development environment (MongoDB, Express.js, React.js, Node.js).
- Analyzed project requirements and designed core modules.
- Created initial wireframes for the login page and shopping list interface.
- Started frontend development using React.js: created basic structure, reusable components, and UI layout.

Remarks of
Departmental/Sectional Head of Organization

Signature:
Name:

2nd Week

Name of Department/Section:

Period From 23-June-2025 To 29-June-2025

Brief report by the student trainee about the work undertaken/done during this week:

- Reviewed the structure of HTML5 pages and practiced using semantic elements to create accessible, well-organized layouts.
- Learned how to build responsive designs using advanced CSS techniques such as Flexbox and Grid.
- Explored strategies for mobile-first design and tested pages across different screen sizes.
- Strengthened core JavaScript skills, including variables, functions, loops, and conditional logic.
- Implemented DOM manipulation to dynamically update page content and styling.
- Added interactive behavior by attaching and managing event listeners for user actions like clicks and form inputs.
- Combined HTML, CSS, and JavaScript to create small practice projects that reinforced concepts from each session.

Remarks of
Departmental/Sectional Head of Organization

Signature
Name:

3rd Week

Name of Department/Section:

Period From 30-June-2025 To 6-July-2025

Brief report by the student trainee about the work undertaken/done during this week:

- Learned the fundamentals of React, a popular JavaScript library for building user interfaces.
- Gained proficiency in creating React components, understanding them as the core building blocks of any React application. This included learning to write both functional and class-based components.
- Explored JSX, a syntax extension for JavaScript that allows for writing HTML-like code within a React environment. This simplified the process of creating and rendering UI elements.
- Understood the role of the Virtual DOM (Document Object Model) in optimizing performance. This involved learning how React efficiently updates the user interface by comparing the virtual DOM with the real DOM and making minimal changes.
- Mastered the concepts of 'State' and 'Props', which are crucial for managing data flow in a React application.
- Developed skills in passing data between components using Props and managing a component's internal, dynamic data with State, enabling the creation of interactive and responsive user interfaces.

Remarks of
Departmental/Sectional Head of Organization

Signature:

Name:

4th Week

Name of Department/Section:

Period From 7-July-2025 To 13-July-2025

Brief report by the student trainee about the work undertaken/done during this week:

- **React Hooks:** Studied and implemented React Hooks, including useState for managing component state and useEffect for handling side effects such as data fetching.
- **React Router:** Gained an understanding of client-side routing and utilized React Router to manage navigation within a single-page application.
- **Context API:** Explored the Context API for efficient state management, learning to share data across the component tree without the need for prop drilling.
- **Data Fetching:** Began working with asynchronous operations by fetching data from APIs using popular methods like the Fetch API and the Axios library.

Remarks of
Departmental/Sectional Head of Organization

Signature:
Name:

5th Week

Name of Department/Section:

Period From 14-July-2025 To 20-July-2025

Brief report by the student trainee about the work undertaken/done during this week:

- **Introduction to Node.js:** Gained foundational knowledge of Node.js, a JavaScript runtime environment. This included understanding its event-driven, non-blocking I/O model and how it differs from traditional server-side technologies.
- **Core Modules and npm:** Explored core Node.js modules like `http` and `fs`, and learned to use the Node Package Manager (npm) to install and manage third-party libraries for building robust applications.
- **Introduction to Express.js:** Studied Express.js, a popular and flexible Node.js web application framework. Learned how to set up a basic server, define routes, and handle incoming HTTP requests.
- **Middleware and Routing:** Developed an understanding of middleware in Express.js and its role in handling tasks like logging, authentication, and parsing request bodies. Mastered routing to create different endpoints for various functionalities.
- **Building RESTful APIs:** Applied knowledge of Node.js and Express.js to build RESTful APIs from the ground up. This involved creating endpoints for common operations like `GET`, `POST`, `PUT`, and `DELETE` to manage data.
- **Database Integration:** Learned the basics of integrating a database with the Express.js application, paving the way for building dynamic, data-driven back-end services.

Remarks of
Departmental/Sectional Head of Organization

Signature:
Name:

6th Week

Name of Department/Section:

Period From 21-July-2025 To 27-July-2025

Brief report by the student trainee about the work undertaken/done during this week:

- **Introduction to Databases:** Gained an understanding of the fundamental role of databases in modern applications for persistent data storage.
- **SQL vs. NoSQL:** Studied the key differences between SQL (relational) and NoSQL (non-relational) databases. This included learning about SQL's structured, table-based approach and its emphasis on data integrity, versus NoSQL's flexible, document-based models designed for scalability and handling unstructured data.
- **MongoDB:** Focused on MongoDB, a leading NoSQL database. Learned its document-oriented model, which stores data in flexible, JSON-like documents called BSON.
- **Mongoose:** Integrated Mongoose, an Object Data Modeling (ODM) library, with a Node.js application. This provided a structured, schema-based solution for interacting with the schemaless MongoDB database, simplifying data validation and management.
- **CRUD Operations:** Mastered the four fundamental database operations: Create, Read, Update, Delete.
- **API-Database Connection:** Developed and implemented the logic to connect a Node.js and Express.js back-end with the MongoDB database, allowing the application to perform CRUD operations via the RESTful APIs created in the previous week.

Remarks of
Departmental/Sectional Head of Organization

Signature:
Name:

7th Week

Name of Department/Section:

Period From 28-July-2025 To 03-August-2025

Brief report by the student trainee about the work undertaken/done during this week:

- **Front-end and Back-end Connection:** Learned how to connect a React front-end to a Node.js/Express back-end. This involved setting up a development environment where the front-end and back-end servers can communicate effectively.
- **API Calls:** Gained hands-on experience making API calls from a React application to an Express server. Utilized the Fetch API or libraries like Axios to perform HTTP requests (e.g., GET, POST) to fetch or send data.
- **State Management with Redux:** Explored Redux as an optional but powerful tool for managing application state. Studied its core principles, including the use of a single source of truth (the store) and predictable state updates, which is crucial for building large-scale, complex applications.
- **Full-Stack Development:** Integrated all the skills from previous weeks—React, Node.js, Express, and MongoDB—to build a complete, full-stack web application. This involved connecting the UI to the API and the API to the database, enabling a seamless flow of data.

Remarks of
Departmental/Sectional Head of Organization

Signature:
Name:

8th Week

Name of Department/Section:

Period From 4-August-2025 To 17-August-2025

Brief report by the student trainee about the work undertaken/done during this week:

- Deployment: Explored the process of deploying a web application to a live server. Learned about different hosting services and the steps required to make a project accessible to the public.
- Collaboration: Collaborated with other developers from Codec Technologies. This provided practical experience working in a team environment, including code reviews and version control best practices.

Remarks of
Departmental/Sectional Head of Organization

Signature:
Name:

MANAV RACHNA INTERNATIONAL INSTITUTE OF RESEARCH & STUDIES
(Deemed to be University)

Offers Following Programmes Under Eight Faculties:

1. SCHOOL OF ENGINEERING AND TECHNOLOGY

B.Tech Normal (4yr) & Lateral Entry (3 yr.)

Aeronautical Engg, Automobile Engg, Biotechnology, Civil Engg, Computer Science & Engg and with various specializations in association with IBM, Electronics & Communication Engg with specialization in AI & IOT in collaboration with Intel Corp, Electrical & Electronics Engg, Mechanical Engg, Mechanical Engg.-Industry Integrated (in association with JBM).

M.Tech Programmes (2 yr.)

Biotechnology, Computer Engg/Computer Engg and Networking, Electronics & Communication Engg with specialization in Communication Systems/VLSI Design & Embedded Systems, M.Tech in Automation & Robotics in association with Mitsubishi Electric India , Mechanical Engg with specialization in Industrial Engg., Civil Engg with specialization in Structural Engg./Transportation Engg./Construction Management

M.Sc. Biotechnology

Ph.D Programmes

Engineering and Technology, Humanities and Applied Sciences

2. SCHOOL OF MANAGEMENT STUDIES

MBA Dual Specialization(Finance/Event and Media Management/Marketing/Human Resource Management/International Business/Information System/Business Analytics/Digital Marketing/Entrepreneurship (2yr.) MBA in Healthcare Management (2Yrs.), MBA in Human Resource Management (2 yr), B.Sc.-Hospitality & Hotel Administration (3yr.)

3. SCHOOL OF COMPUTER APPLICATIONS

Bachelor of Computer Applications (BCA) (3yr.), B.Sc.-Information Technology(3yr.), Master of Computer Applications (MCA) (3yr.), Master of Computer Applications (MCA) Lateral Entry (2yr.)

4. SCHOOL OF MEDIA STUDIES & HUMANITIES

BA – Journalism and Mass Communication (3yr.), MA – Journalism and Mass Communication (2yr.), PG Diploma in Advertising and Public Relation (1 yr), Bachelor of Arts (Hons)(3yr), Master of Arts(M.A.)(2 Yr)

5. SCHOOL OF APPLIED SCIENCES

Bachelor of Physiotherapy (4.5 yr.), B.Sc.-Nutrition and Dietetics (3yr.), Master of Physiotherapy with specialization in (Musculoskeletal, Neurology, Cardio Pulmonary, Sports) (2 yr), M.Sc.-Nutrition & Dietetics (2yr.)

6. SCHOOL OF ARCHITECTURE & DESIGN

Bachelor of Architecture(5yr.), B.Sc.- Interior Design (3yr.)

7. SCHOOL OF BEHAVIOURAL AND SOCIAL SCIENCES

BA/B.Sc-Applied Psychology (3 yr.), MA/M.Sc- Applied Psychology (2 yr.), Master of Social Work (2 yr.), Post Graduate Diploma in Counseling (1yr.), BA (Hons.)-Economics(3 yr.)

8. SCHOOL OF COMMERCE & BUSINESS STUDIES

Bachelor of Business Administration (BBA) General (3yr.), Bachelor of Commerce (Hons) (3yr.) Bachelor of Business Administration (BBA) Banking & Financial Markets (3yr.), Bachelor of Business Administration (Global) – International Business (3yr.), Bachelor of Commerce (Hons.)-Industry Integrated (3yr.), M.Com (2yr.)