E-CONTENT

INDUSTRIAL AND IN-HOUSE TRAINING

Introduction, Rationale, and Structure

1.0 Title and Purpose

This e-content module covers the mandatory **Industrial/In-House Training – I (3.1)** component of the Diploma in Computer Engineering curriculum, which is designed to be assessed in the Third Semester. The core purpose of this training is to align the student's practical skills and theoretical knowledge with the **National Skill Qualification Framework (NSQF) Level 4** requirements.

1.1 Rationale for Industrial/In-House Training (3.1)

Industrial training is a critical component of the curriculum, aiming to develop **relevant skills** in students as per NSQF requirements. The specific rationale includes:

- Exposing students to the present and future needs of various relevant industries.
- Acquainting students with the **desired attributes** and competencies required for an industrial environment.
- Providing an opportunity to apply theoretical knowledge to solve real-world industrial problems.

1.2 Training Structure and Duration

The curriculum mandates industrial training in two stages (after the First and Second Year). Training – I is assessed in the Third Semester.

Training Stage	Curriculum Reference	Duration	Assessment Semester	Status
Training – I	**3.1 Industrial/In-House Training – I**	Minimum **4 Weeks**	Third Semester	Mandatory

Objectives, Course Outcomes, and Evaluation Scheme

2.0 Course Outcomes (COs)

The overall training objective is to develop skills to accomplish quality tasks and solve problems using industry-standard methods, tools, materials, and information. After completing Industrial/In-House Training – I (3.1), students will be able to demonstrate the following outcomes:

Course Outcome (CO)	Programme Outcome (PO) Alignment	
Take necessary **safety precautions and measures**.	**Develop required competencies and skills** for relevant industries.	**PO3: Develop Skills**
	Develop writing, speaking, and presentation skills for effective communication.	**PO4: Core Skill**
	Understand the working environment of industries.	**PO5: Responsibility**
	PO5: Responsibility	
	Work in a team for solving industrial problems.	**PO5: Responsibility**
	Learn about present and future requirements of industries.	**PO5: Responsibility**

2.1 Study and Evaluation Scheme (3.1)

The Industrial/In-House Training – I (3.1) is a **practical** subject assessed in the Third Semester with the following scheme:

Component	L	P	Credits (L+P=C)	Internal Assessment (Pr)	External Assessment (Pr)	Total Marks
Training – I (3.1)	-	2	**0 + 1 = 1**	40	60	**100**

General Training Guidelines and Instructional Strategy

3.0 General Training Guidelines

Students must adhere to the following general guidelines during their training:

- **Selection:** Students must select the training/project according to the **need of the relevant industry**.
- **Conduct:** The student must get acquainted with the **desired attributes** for the industrial environment.
- **Documentation:** Prepare a detailed **Industrial Training Report**.
- **Presentation:** Upon completion, the student must **present the report using PPT**.
- **Teamwork:** The student is required to **work as a team member** for successful completion of the work.
- **Safety:** The student must take necessary **safety precautions and measures**.

3.1 Instructional Strategy and Assessment

- **Strategy Focus:** The instructional strategy emphasizes placing the student in the **actual working environment** of the industry and placing emphasis on **hands-on experience** gained.
- **Faculty Role:** Faculty of the respective institute shall actively **supervise the students** during the training period.
- **Assessment Tool (Viva Voce):** The viva voce assessment is designed to gauge the **conceptual understanding** and the **behavioral aspects** as regards the job role and the specific task at hand.
- **Viva Questions:** Questions will cover the job role, specific tasks, and key areas like **safety, quality, environment, and equipment**.

Industrial Training Report Guidelines – I: Objective and Quality

Industrial Training Report Objective

The main objective of the Report is to prepare the student to write a **professional and detailed report**. The essence of the Report is to describe and conclude on the training experience:

- The **work** a student has undertaken during his training.
- The **techniques** he has learned.
- The **skills** he has acquired.
- The **contributions** he has made to his work environment.
- The **conclusions** he has drawn from his experience.

Report Quality

1. The organization of the Final Report should be **in sequence** and it should help the reader to obtain a clear understanding of the detailed points presented in the report.
2. Topics within the report should be **coherent, clear and concise**. Discussions should be focused on **work-oriented**.
3. The report should be illustrated with appropriate **tables, diagrams and graphs** where necessary. Tables and graphs should be **properly labeled**.
4. Any facts and figures about the company where the training was completed should be supported by **references, internal company reports, etc.**.
5. The report should be a **minimum of 25 pages and not more than 40 pages**. One copy of the original training report in bound form is to be submitted.
6. The report should describe your work **in your own words**.
7. The report should have a **bibliography and references**, where appropriate.

GUIDELINES ON WRITING THE INDUSTRIAL TRAINING REPORT

Industrial Training Report Objective

The main objective of the Report is to prepare the student to write a professional and detailed report. The essence of the Report is to describe the work a student has undertaken during his training, the techniques he has learned, the skills he has acquired, the contributions he has made to his work environment and the conclusions he has drawn from his experience.

Report Quality

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6. The report should describe your work in your ownwords.
7. The report should have a bibliography and references, whereappropriate.

Report Writing Format and Contents

The report should follow the following format:

1. **Title Page**: Please refer the specimen is provided as appendix.
2. **Acknowledgements (Optional**): This is an optional section which acknowledges the help, assistance and advice given to the student during his training and the

preparation of hisreport.

3. **Table of Contents**: The report must have a table of contents, which shows the principal divisions of the work and the page numbers on which they are found. All the pages except the Title Page and Table of Contents page(s) must be listed. The Table of Contents page(s) must be numbered in lower case Roman numerals at the bottom center of each page, starting with "ii" or with "iii" if an Acknowledgements page has beenincluded.

4. **Abstract**: This section will comprise a brief summary of the entire report. No illustrations, graphs, tables or charts should be included in thissection.

5. **Introduction**: The purpose of this section is to provide a brief introduction of the work. It should not exceed two pages (2) but should be a minimum of 300 words and should comprise the followingtopics:

    a) **Company Background**: A brief and clear presentation the type of business of the company and the functions of the department(s) in which the student conducted histraining

    b) **Training Objective**: Description of the student's training objective and workaccomplishments.

6. **Student's Work Assignment**: A general, non-technical presentation of the student's function within the company and his workassignments.

7. **Technical Section:** This section constitutes the core (substance) of the report. It describes the work that a student has accomplished during his training, the techniques he has learned, the skills he has acquired, the contributions he has made, the responsibilities he has assumed, the equipment he has used (if any), and all other pertinent information. It contains all the crucial technical details including illustrations, equations, programs, software versions, graphs, tables, charts, diagrams, etc.

8. **Conclusion and Recommendations**: The conclusions of the report are summarized in this section. Any pertinent conclusion concerning the training, the

work accomplished, the techniques learned, the importance and merits of the training program, its benefits and drawbacks, recommendations on how to improve it and other constructive comments and suggestions should be included in this section.

9. **References**: A list of the references must be provided. Each reference must be adequately cited whereappropriate.

Appendix

(A typical Specimen of Cover Page & Title Page)

<Font Style Times New Roman– Bold>

INDUSTRIAL TRAINING AT <Company Name>, <Place>

<FontSize18><1.5linespacing>

REPORT

<FontSize14>

Submitted by

<FontSize12><Italic>

NAME OF THECANDIDATE
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Roll Number:
<FontSize12>

In partial fulfillment of the requirements for the award of the diplomain

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COMPUTER ENGINEERING

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MONTH, YEAR
<TIMESNEWROMAN12>

INDUSTRIAL TRAINING

DECLARATION

I affirm that the Industrial Training report titled “INDUSTRIAL TRAINING AT <Company Name>,<Place>” being submitted in partial fulfillment of the requirements for the award of the Diploma inCOMPUTER ENGINEERING isthe original work carried out by me. It has not formed the part of any other project work submitted for award of any degree or diploma, either in this or any other Institution.

(Signature)

Name of the Student

Roll No

NSQF Alignment and Programme Outcomes (POs)

7.0 Alignment with NSQF Level 4

The Industrial/In-House Training – I (3.1) aligns the student with the requirements of **NSQF Level 4**. This level emphasizes:

- **Process:** Work in familiar, predictable, routine situations with clear choices.
- **Professional Knowledge:** Factual knowledge of the field of study.
- **Professional Skill:** Recall and demonstrate practical skill using appropriate tools and **quality concepts**.
- **Responsibility: Responsibility for own work and learning**.

7.1 Contribution to Programme Outcomes (POs)

The training directly contributes to the following Diploma Programme Outcomes (POs) :

- **PO3 (Develop Skills):** Develop skills to accomplish quality tasks and solve problems using methods, tools, materials, and information. The training helps **develop required competencies and skills** for relevant industries.
- **PO4 (Core Skill):** Demonstrate skill of communication, basic mathematics, collecting and organizing information along with knowledge of social, political and natural environment. The training helps
- responsibility of own works and supervises others work. The training ensures students **understand the working environment**, **take safety precautions** , and **work in a team**. **develop writing, speaking and presentation skills**.