

MEMORANDUM OF UNDERSTANDING

(MOU)

BETWEEN



ZF Commercial Vehicle Control Systems India Limited, Chengalpet

&



Education shapes your Life

Government Polytechnic College, Arakandanallur, Villupuram

for

Implementation of Industry-Based Apprenticeships in Diploma Education under the
Directorate of Technical Education-2023 Regulations, through the National Apprenticeship
Training Scheme (NATS), Ministry of Education, Government of India

This Memorandum of Understanding is made and executed at Chengalpet on 8.6.2026 between **ZF Commercial Vehicle Control Systems India Limited**, a company incorporated under the provisions of "The Companies Act, 1956", having its registered office at Plot No: AA8, Central Avenue, Auto Ancillary SEZ, Mahindra World City, Chengalpet, Tamil Nadu (hereinafter referred to as "**ZFCVCS**") which expression, unless the context requires otherwise, shall include its successors and permitted assignees.

And

128, Government Polytechnic College, Arakandanallur, Villupuram, functioning under the control of **Directorate of Technical Education (DoTE), Tamil Nadu**, having office at Kandachipuram Main Road, S.Kollur, Arakandanallur Post, Tirukoilur Taluk, Villupuram – 605 752, (hereinafter referred as "**128 -GPTC**") which expression, unless the context requires otherwise, shall include its successors, affiliates and permitted assignees).

Both the parties shall hereinafter be referred to as such and/or individually as "Party" and collectively as "Parties"

RECITALS

WHEREAS INDUSTRY **ZF Commercial Vehicle Control Systems India Limited** is engaged in the manufacture of automotive components for commercial vehicles.

It specializes in braking systems, safety systems, and vehicle control technologies for trucks and buses.

AND WHEREAS **Government Polytechnic College, Arakandanallur, Villupuram** was established by the State Government of Tamil Nadu with the objective of bringing about coordinated development of Technical Education.

AND WHEREAS **Government Polytechnic College, Arakandanallur, Villupuram** and **ZF Commercial Vehicle Control Systems India** mutually agreed to work on 6/12 months internship training

AND WHEREAS **DoTE** has mandated to impart technical Education to its Diploma students through a **Industrial Training Program** (hereinafter referred to as "**Training**")

Program”) and and ZF Commercial Vehicle Control Systems India Limited agreed to provide such Training with the terms as follows:
NOW THEREFORE, in consideration of the mutual covenants, conditions and agreements set forth herein, the Parties hereby enter into this MoU, pursuant to the prevailing laws and regulations:

1. Definitions

- a. “Industrial Training Partner” means the Company ZF Commercial Vehicle Control Systems India Limited which has signed MOU with Government Polytechnic College, Arakandanallur, Villupuram for imparting Industrial.
- b. “Industrial Training Co-ordinator” means the Single Point of Contact (SPOC) nominated by “Industrial Training Partner”
- c. “HOD” means the person designated as Head of Department of the Educational Institution.
- d. “Nodal Officer” means the Co-ordinator Official assigned by the Principal of the Institute.
- e. “Principal” means the Principal of the Educational Institution also known as Head of the Institution.
- f. “Training Program Co-ordinator” shall be Single Point of Contact (SPOC) nominated by the educational institution

2. Program Highlights:

This program aims to bridge the skill gaps for diploma engineers by integrating academic learning with practical industry experience. The objectives of the programme are to:

- bridge the gap between academics and Industries through 6/12-months Industrial Training.
- increase employment opportunities for the students.
- build a talent pool for the industries in the state.
- encourage practical learning.
- provide earning-while learning opportunities for students.

- develop industry-oriented curriculum based on latest technologies.

3. Industrial Training Program:

In this program, students have an option to opt for one year industrial training in the third year of their Diploma Program. Students shall undergo two years of academic study - in the first and second year as per the curriculum in the institutions and one year of industrial training in the third year with the Industrial Training Partner ZF Commercial Vehicle Control Systems India Limited.

3.1 Students Eligibility and general guidelines:

The Principal / HOD / Industrial Training Partner should explain in detail about the program at the beginning of second year (III Semester) or at the time of admission, as the case may be, about the option to select this program as per the guidelines.

- This training program is effective from June 2026.
- Student's Minimum Age must be 16 years (completed) at the time of commencement of third year for enrolment to this training.
- For those who have enrolled for Diploma Program and at the start of third year (V Semester), the students shall be given an option to select this training program as per the guidelines.
- Once this training program is opted by the student, it cannot be reverted to the regular curriculum. The student and parent has to submit the undertaking form for this option to the Principal of the institution through the respective HOD.
- Students can avail this one year Industrial training only after getting approval from the Commissioner/Director of Technical Education / Chairman Board of Examinations through their respective institutions.
- During this industrial training program, student has to maintain attendance as per Industry policy.
- Industrial Training shall be provided for six days a week, at their manufacturing plants situated at Chengalpeta Tamil Nadu.

- Week off, public holidays and compensation holidays will be available as per Industry policy.
- Upon successful completion of Training by students, Industry will issue training completion certificate to the students through their respective colleges.
- In the case of Discontinuation of Training by Students in between for whatever reasons, Industry will not provide the training Completion certificate.

3.2 Training Period:

For the student who have opted for Industrial Training and obtained necessary approval, Industrial training can be attended during third year (for the period of one year)

3.3 Training Methodology:

Industrial training shall be a blend of theoretical knowledge, practical skills, industry practice exposure and soft skills aimed to create competent and versatile engineers. It shall be designed in a manner that the students shall be familiarised and acquire the following skill sets

- **Process required:**

Job that requires well developed skill with clear choice of procedures in familiar context.

- **Professional Knowledge:**

Knowledge of facts, principles, processes and general concepts in a field of work or study.

- **Professional skill:**

A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools, materials and information.

- **Core skill:**

Desired mathematical skill, understanding of social, political and the skill of collecting and organizing information, communication.

- **Responsibility:**

Responsibility for own work and learning and collective responsibility for other's works and learning (Team building)

The training will mainly consist of the following during the course of on-the-job training and class room trainings as may be required from time to time.

- Regulations for Industrial Safety (Environment, Health & Safety)
- Product Knowledge and Application
- Continuous Improvement Concepts
- Problem Solving Techniques
- Clean Shop Floor Culture
- Standardised Work Concept (Cycle time calculation methods)
- Preventive and Self Maintenance
- Material Flow Methods
- Management of Error Proofing
- Management of online production results - Digital
- Communication skills
- Time Management
- Presentation skills
- Microsoft basics
- Customer Complaints
- NO Go handling
- Types of losses
- Software Development
- Others

The curriculum shall be jointly designed by the institution and industry, ensuring alignment with industry requirements, academic objectives, and the guidelines prescribed under the Directorate of Technical Education (DoTE) – Regulations 2023. Complete details of model curriculum are given in Annexure – A

3.4 Evaluation and Documentation:

3.4.1 Students shall be required to maintain a daily record of their internship activities in a prescribed handbook or diary and concurrently document their learning progress through a digital platform such as a blog or vlog throughout the duration of the internship.

3.4.2 **Assessment** shall be conducted jointly by Industry Supervisors and the Faculty Mentor, in the presence of an External Examiner appointed by DoTE, as per the evaluation criteria prescribed by DoTE(**Annexure-B**)

The assessment is divided into two parts:

Part 1 – Mid-Term Evaluation (40 Marks):

This evaluation will be conducted in the industry at the end of third month of the internship.

- The Industry Supervisor will award 20 marks based on the student's technical performance, work discipline, and progress.
- The Faculty Mentor will award 20 marks based on regular monitoring, interaction, and assessment of the student's learning outcomes.

Part 2 – End-Semester Evaluation (60 Marks):

This evaluation will be conducted at the industry at the end of the 6th Month.

- The Industry Supervisor will award 20 marks for the student's final performance, project outcomes, and professionalism.
- The Internal Examiner and the External Examiner (appointed by DoTE) will jointly award 40 marks based on the final presentation, report quality, and overall attainment of learning outcomes.

3.4.3 **Attendance** document to be maintained by the industry in the prescribed format.

3.4.4 **Credits:** 20 credits can be given to the students based on the Mid Term Evaluation and end semester exams conducted by the industry supervisor, internal and external examiners. These credits shall be considered for the award of a Diploma in Engineering, provided that all other required parameters are satisfied.

3.4.5 The provisions relating to the maintenance of daily internship records, assessment (Both Mid-Term Evaluation and End-Semester Evaluation), attendance, and award of

credits, as prescribed under Clauses 3.4.1, 3.4.2, 3.4.3, and 3.4.4, shall be implemented independently for the internship in the V Semester and the internship in the VI Semester.

3.5 Discontinuation of Training:

In case, if any student is unable to complete his / her training owing to exceptional situation, he / she shall be relieved from the training only upon submission of a relieving letter from Head of Institution duly approved by DoTE and the Industrial Training Partner. In such cases, accrued credits (if any) shall be provided to such student. For the purpose of acquiring diploma certificate, the criteria will be decided by the State Board of Technical Education.

4. Obligations of ZF Commercial Vehicle Control Systems India Limited

4.1 Role of ZFCVCS Training Provider)

ZF Commercial Vehicle Control Systems India Limited shall collaborate with the educational institutions to provide skill training and industry exposure to students, ensuring they gain hands-on experience and industry-relevant skills.

- a. Design and deliver training programs aligned with industry needs and academic requirements.
- b. Provide mentorship and guidance to students before the commencement of training and during their training period.
- c. Assess the performance of students, provide assessment results and feedback to the institution.
- d. Share current industry trends and practices with the student to keep the curriculum relevant.
- e. Ensure a safe training environment and adherence to industry regulations and standards.
- f. Provide necessary tools, equipment, and resources for effective training.
- g. Work closely with the Training Program Coordinator nominated by the Educational institution to coordinate training schedules and activities.

- h. Establish a system for continuous feedback, assessment and improvement of the training programs.
- i. Industrial Training Program Co-ordinator nominated by INDUSTRY ZF Commercial Vehicle Control Systems India Limited shall co-ordinate with Nodal Officer, Training Program Co-ordinator and Head of the Institution for effective implementation of the Industrial Training.

4.2 Responsibilities of Industrial Training Coordinator

4.2.1 Pre-Training Responsibilities

- a. Preparing and sending internship letters.
- b. Collecting student data (branch-wise, count-wise, eligibility).
- c. Coordinating with industry experts and institution to align and finalize the industrial training curriculum as per academic and industry requirements
- d. Organizing orientation sessions for students about training guidelines, expectations, and company norms.
- e. Collecting undertakings from students and parents.
- f. Coordinating transport, accommodation (if applicable), and reporting instructions.
- g. Ensuring all students are briefed on safety measures and code of conduct.

4.2.2. Responsibilities During Training

- a. Acting as the single point of contact between industry and institution.
- b. Monitoring student attendance, discipline, and performance.
- c. Maintaining regular communication with industry mentors/supervisors.
- d. Conducting periodic reviews through calls, visits, or online meetings.
- e. Maintaining a record of weekly/monthly progress reports.
- f. Ensuring compliance with training guidelines and institutional norms.
- g. Providing support to students in case of emergencies or grievances.

4.2.3. Post-Training Responsibilities

- a. Verifying and evaluating student logbooks, reports, and assessment records.

- b. Coordinating viva-voce / internal evaluation processes.
- c. Compiling and submitting final consolidated student performance reports.
- d. Collecting feedback from students to improve future training programs.
- e. Closing the training cycle with a final report to the industry and institution.

4.3 Guidelines for the INDUSTRY ZF Commercial Vehicle Control Systems India _ to plan the training and evaluation.

The Industrial Training shall be designed as a balanced integration of Teaching – Learning – Practice, ensuring that students acquire both theoretical knowledge and hands-on industrial competencies required for a Diploma Engineer.

To achieve this, the industry partner is requested to adhere to the following guidelines while planning the training schedule, instruction methods, mentoring process, and evaluation.

- a. **Teaching Component:** Conduct theory sessions on domain skill gaps, industry standards, tools/technologies, safety, quality systems, troubleshooting, case studies, and professional communication.
- b. **Learning Component:** Provide plant/department exposure, process demonstrations, observation of production/maintenance/QC activities, shadowing of employees, understanding documentation (KPIs, logs, reports), and cross-functional exposure.
- c. **Practice Component:** Offer supervised hands-on tasks (assembly, machining, wiring, testing, inspection, calibration), maintenance activities, use of industrial software, mini-projects/Kaizen tasks, and involvement in trials/audits.
- d. **Structured Training Plan:** Prepare a week/month-wise plan with skills, department rotation, learning outcomes, safety briefings, mentor allocation, attendance rules, and monitoring methods.
- e. **Mentorship & Supervision:** Assign mentors, provide daily/weekly guidance, review progress, and give continuous feedback.
- f. **Faculty Monitoring & Facilitation:** The industry shall facilitate and permit the Training Program Coordinator from the institution to visit the industry once in every two weeks for effective academic monitoring, student mentoring, progress review, and coordination. The industry shall extend necessary cooperation, access, and interaction

with mentors/students during such visits to ensure smooth implementation of the industrial training programme.

- g. **Academic Examinations and Placements:** The industry permits and facilitates students undergoing industrial training/apprenticeship to attend semester examinations, placement drives, and other mandatory academic requirements as notified by the Institution/DoTE, without treating such absence as leave or discontinuity in training.
- h. **Safety & Compliance:** Conduct safety training, provide PPE, ensure supervised work in permitted areas, and report incidents promptly.
- i. **Working Hours:** The working hours for interns shall be limited to normal daytime industrial working hours, not exceeding 8 hours per day and 48 hours per week, inclusive of breaks, and shall strictly comply with applicable labour, safety, and academic regulations. Interns shall not be engaged in overtime or night shifts unless the student agrees.
- j. **Attendance & Conduct:** Maintain attendance, ensure discipline and punctuality, and follow assigned shifts.
- k. **Evaluation & Assessment:** Assess task performance, technical skills, behaviour, teamwork, logbooks, reports, and submit final performance evaluation.
- l. **Feedback & Improvement:** Provide feedback on student performance and suggestions for improving the student performance.

4.4 Industry ZF Commercial Vehicle Control Systems India shall provide a monthly stipend comprising Industry Contribution of ₹14456 and NATS Support of ₹_____, making a total monthly stipend of ₹_____ to each intern. In addition, the Industry shall provide food twice a day and transportation to the intern students free of cost.

4.5 Industry ZF Commercial Vehicle Control Systems India shall provide medical insurance and personal accident insurance to students free of cost.

4.6 Ensure compliance with regulatory bodies.

5. Obligation of DoTE

The Commissioner/Director of Technical Education / Chairman Board of Examinations, Tamil Nadu, oversees the overall administration and strategic planning to identify the eligible Skill Knowledge Provider / Training Provider / Industry Partner of this program.

- Foster partnerships with Skill Knowledge Provider / Training Provider / Industry Partner for industrial training.
- Formulate policies for academic, administrative, and industrial activities.
- Prepare Guidelines for the stakeholders, including students, parents, faculty, and industry partners.
- Necessary arrangements to admit the required students for the industrial training
- Monitor and evaluate the performance of industries and institutions. MOU shall be signed with the Industrial training Partner by clearly mentioning the terms and conditions for the industrial training procedure and assessment methodology.
- To award grade and assessment marks shall be finalised or revised by the Chairman Board of Examinations as per regulation norms. The award of Diploma shall be the decision of the Chairman Board of Examinations.
- DoTE will circulate the program highlights and benefits to all the diploma institutions and the head of the institutions shall invite applications from the students.
- The curriculum, Syllabus and assessment method shall be revised time to time based on feedback from stakeholders.

6. Obligations of Head of Institution – Principal

Role:

The Institution Head oversees the day-to-day operations of the institution, ensuring that the industrial training program is integrated into the academic schedule and that all logistical aspects are managed efficiently.

Responsibilities:

- Coordinate with the Directorate, Nodal Officer for Industrial Training Partner and Training Program Coordinator to implement the industrial training program.

- Ensure that students have access to necessary resources and support systems for their training.
- Manage administrative tasks related to the training program, including scheduling, documentation, and communication with DoTE and Industry Partner.
- Engage faculty members for the training program, facilitate them to collaborate with industry partners.
- Address any issues or challenges that arise during the training period.
- Track the progress of the training program and report to the Commissioner of Technical Education and other relevant authorities.

7. Obligations of Nodal Officer

Role: The Nodal Officer acts as the single point of contact (SPOC) for the industrial training program, facilitating communication between the institution, students, and industrial training partners.

The Placement and Training Officer will be the Nodal Officer

Responsibilities:

- Serve as the liaison between the institution, students, and industrial partners.
- Coordinate all activities related to the industrial training program, including scheduling, site visits by the training program coordinator, and assessments.
- Maintain comprehensive records of student participation, performance, and feedback from industry partners.
- Ensure clear and effective communication with all stakeholders involved in the training program.
- Provide support services to students, including orientation sessions, counselling, and addressing queries or concerns.
- Collect and analyse feedback from students and industry partners to improve the training program.

- Ensure that all aspects of the training program comply with curriculum requirements and industry standards.
- Prepare an undertaking form to opt for this training program, the undertaking should be signed by the student and parent witnessed by the training program coordinator and HOD.

8. Obligations of Training Program Co-ordinator

Role: One faculty from the department should be assigned for every 30 students / every industry by the HOD and Principal as a Training Program Coordinator.

Training Program Coordinator shall play a crucial role in overseeing and guiding students during their industrial training program in diploma engineering.

Pre-Training Responsibilities:

a. Orientation and Preparation:

- Conduct orientation sessions to familiarize students with the objectives, expectations, and guidelines of the industrial training program. Industry Partner can also be involved in this orientation program.
- If necessary, orientation program for parents can also be arranged
- Assist students in understanding the importance of industrial training in their academic and professional development.

b. Training Plan Development:

- Help students develop a detailed training plan outlining learning objectives, tasks, and expected outcomes for the training period.
- Guide students in setting SMART (Specific, Measurable, Achievable, Relevant, Time-bound) goals for their training experience.

c. Placement Coordination:

- Collaborate with the placement cell or institute industry interaction cell office to secure suitable training placements for students that align with their academic specialization and career interests.
- Facilitate communication between the institution and industry training partners to ensure smooth coordination of training arrangements.

During Training Responsibilities:

d. Monitoring and Support:

- Regularly monitor the progress of students during their industrial training. Maintain communication with both students and industry supervisors to track performance and address any issues that may arise.
- Provide support and guidance to students, offering advice on technical challenges, professional conduct, and workplace etiquette.
- Visit the industrial training industry once every month.

e. Technical Guidance:

- Offer technical guidance and mentorship related to the specific engineering discipline or specialization of the students. Help them apply theoretical knowledge to practical situations encountered in the industry.

f. Problem-Solving Assistance:

- Assist students in overcoming obstacles or challenges encountered during their training. Encourage them to develop problem-solving skills and resilience in real-world engineering scenarios.

g. Feedback and Evaluation:

- As per DoTE internship Guidelines.

Post-Training Responsibilities:

h. Reflection and Debriefing:

- Conduct debriefing sessions with students to reflect on their training experiences, discuss lessons learned, and identify areas for further improvement.

- Help students articulate their learning outcomes and how these experiences contribute to their professional growth.

i. **Documentation and Reporting:**

- Ensure comprehensive documentation of students' training activities, achievements, and feedback received from industry supervisors.
- Prepare reports summarizing students' performance and submit these to relevant departments or committees for review and assessment.
- Collect all the documents related to the assessment as per the guidelines of the evaluation.

j. **Career Counselling:**

- Provide career guidance and counselling to students based on their industrial training experiences. Assist them in leveraging these experiences for future job applications or further academic pursuits.

k. **Continuous Improvement:**

- Collaborate with industry partners to continuously improve the quality and relevance of the industrial training program.
- Incorporate feedback from students and industry supervisors to enhance the effectiveness of future training and placements.

9. **Obligations of the Students**

A. **Before Starting Industrial Training:**

a. **Orientation and Preparation:**

- Attend orientation sessions conducted by the institution or faculty mentors to understand the objectives, expectations, and guidelines of the industrial training program.

- Familiarize with the specific policies, procedures, and safety regulations of the host organization where they will be undergoing training.
- Sign the undertaking form in consultation with the parent/guardian.

b. Professional Attire and Conduct:

- Dress appropriately and professionally according to the standards of the industry and host organization.
- Maintain a positive attitude, demonstrate punctuality, and adhere to workplace etiquette and norms.

B. During Industrial Training:

c. Learning and Engagement:

- Actively engage in all assigned tasks and projects. Seek opportunities to learn new skills and technologies relevant to their field of study.
- Take initiative in asking questions, seeking clarification, and participating in discussions with supervisors and colleagues.
- Ensure to attend all on the job learning sessions without fail
- Ensure to follow the rules and regulations of **INDUSTRY ZF Commercial Vehicle Control Systems India** relating to persons under training.
- Ensure to use the assets of **INDUSTRY ZF Commercial Vehicle Control Systems India** as per the instructions given and to ensure not to cause any damage to machinery.

d. Adaptability and Flexibility:

- Adapt to the work environment and demonstrate flexibility in handling various responsibilities and challenges that arise during your training.
- Be open to different roles and tasks assigned to them, as this will broaden their experience and skill set.

e. Professionalism and Communication:

- Communicate effectively with supervisors, colleagues, and clients as required. Practice clear and concise verbal and written communication.
- Demonstrate professionalism in all interactions, respecting confidentiality, and adhering to company policies and procedures.

f. Safety and Compliance:

- Prioritize safety at all times. Familiarize yourself with safety protocols, procedures, and emergency exits in the workplace.
- Follow all safety guidelines and regulations to ensure their well-being and that of others around them.

C. After Completing Industrial Training:

g. Reflection and Documentation:

- Reflect on their training experience. Evaluate what they have learned, the challenges they faced, and how they have grown professionally.
- Maintain a journal or log documenting their daily activities, achievements, and lessons learned during the training period.

h. Feedback and Evaluation:

- Seek feedback from industry supervisor and faculty mentor on their performance and areas for improvement.
- Use constructive feedback to enhance their skills and competencies for future career opportunities.

i. Career Planning:

- Utilize the industrial training experience to make informed decisions regarding their career planning and professional development
- Discuss their career goals and aspirations with the faculty mentor or career counsellor for guidance on next steps after completing the diploma.

D. Documents to be maintained by the students

The following documents must be maintained by the students and submitted to the Institution. The HoD shall collect all required documents and forward the End Semester Assessment Marks to the Chairman, Board of Examinations, through the Principal, for Result Declaration and Award of Diploma.

(i) Attendance Certification

Students must obtain monthly attendance certification from their industry supervisor using the prescribed format issued by the Institution.

Students must sign the form and submit it to the assigned faculty mentor.

Regularity in attendance and timely submission will be considered while awarding Assessment Marks.

(ii) Daily Activity Record

Students must maintain a Daily Activity Record, documenting:

- Daily tasks and responsibilities
- Skills learned
- Tools or equipment handled
- Daily observations and outcomes

This record should be updated every day and may be periodically verified by the industry supervisor or faculty mentor.

(iii) Industrial Training E-Portfolio (Blogs & Vlogs)

Students are required to create either a blog (a series of written posts with images) or a vlog (a single, well-edited video) that documents and reflects upon their entire six-month industrial training. The student must maintain a professional tone and not disclose any confidential company information or trade secrets thus respecting the company's privacy

policy. The student shall not show any confidential company documents, designs, or processes on screen.

All digital content must be created and shared only after obtaining prior approval from the host organization and must strictly adhere to its confidentiality and media guidelines.

(iv) Internship Report

Students need to maintain the internship report submitted to the institution and industry for evaluation at the end of six months of Training. This report consists of their attendance certification, daily activity record and Industrial Training E-Portfolio(Blogs and Vlogs). The report has to be submitted along with a Bonafide certificate signed by the industrial supervisor and training program coordinator.

10. No Partnership or Agency:

By this MOU, INDUSTRY ZF Commercial Vehicle Control Systems India does not intend, nor does it agree, to act as an agent of the State Government of Tamil Nadu. All activities undertaken by the INDUSTRY ZF Commercial Vehicle Control Systems India pursuant to this MOU (and any subsequent memorandum of understanding or agreement) are intended to promote only the Industrial Training.

The Parties are independent contractors. Neither Party shall have any right, power or authority to enter into any agreement, or incur any obligation or liability, for, or on behalf of, the other. Nothing in this MOU shall be interpreted or construed to create an association or partnership between the Parties, deem them to be persons acting in concert, or to impose any liability attributable to such relationship to either of them, nor shall either Party be deemed to be the agent of the other, or entitled to commit or bind the other Party, in any manner, for any purpose.

Nothing in this MoU shall create or be deemed to create any third-party beneficiary rights in any Person not a party to this MoU.

11. Representations and Warranties:

Each Party hereby represents and warrants that:

It is duly organized and validly existing under applicable laws;

It has full power and authority to execute and deliver this MOU;

Its signatory is duly authorized to execute this MoU for and on behalf of the relevant Party;
and

It has all the requisite legal and organizational power to carry out and perform its obligations under the terms of this MOU.

12. Term and Termination

The MOU shall enter into force with effect from and shall be effective unless terminated by the Parties. The MOU can be terminated by either Party at any time by giving **three months'** prior written notice to the other Party.

13. Confidentiality:

Each Party shall treat and ensure that its directors, partners, members, office bearers, officers, managers, employees, legal, financial, and professional advisors (collectively, "**Representatives**") shall treat as strictly confidential, and not reveal to any third party without the prior written consent of the other Party, any confidential information received or obtained from the other Party as a result of entering into or performing this MOU.

Exceptions: The provisions of this Article shall not apply to: (a) disclosure of information that is or becomes generally available to the public (b) disclosure by a Party to its

Representatives provided such Representatives are bound by similar confidentiality obligations. (c) disclosure, after giving prior notice to the other Party to the extent practicable under the circumstances and subject to any practicable arrangements to protect confidentiality, to the extent required by law or legislative or judicial or regulatory process.

14. Intellectual Property:

All intellectual property rights of a Party developed/acquired prior to or independently of this MOU ("**Pre-Existing IP**"), shall belong exclusively to such Party, and this MOU shall not be construed as giving either Party any rights over such Pre-Existing IP of the other Party. All intellectual property created jointly by the Parties or created to achieve the purpose and objective of the MOU, shall belong to INDUSTRY ZF Commercial Vehicle Control Systems India only.

Each Party is given limited rights to use the trademark/tradename/logo of the other Party for the purpose of any press releases or promotions related to the objectives of this MOU or with prior permission of the Parties, to form part of any presentations made by either Party under this MOU.

15. Data Privacy:

Parties agree to ensure compliance with applicable data protection laws as may be in force from time to time. The Parties acknowledge that each Party will process and store the data in its possession or under its control as an independent controller/data fiduciary/data processor.

16. Binding Nature

The Parties agree, confirm and acknowledge that Clauses of (*Confidentiality*), (*Intellectual Property Rights*) and (*Data Privacy*) are intended to be legally enforceable and binding on the Parties.

Without prejudice to applicable laws, Parties shall be entitled to injunctive or other equitable relief to prevent or end any breach of Clauses (*Confidentiality*), (*Intellectual Property Rights*) and (*Data Privacy*) of this MoU

17. Miscellaneous:

Modifications: This MOU may be amended only by an instrument in writing signed by duly authorized representatives of each of the Parties.

Notice. A notice or other communication given under or in connection with this MOU (a “**Notice**”) shall be:

in writing.

in the English language; and

sent by the Permitted Method (as defined below) to the Notified Address (as defined below).

The “**Permitted Method**” means any of the methods set out in the first column below, the second column setting out the date on which a Notice given by such Permitted Method shall be deemed to be given; provided that, the Notice is properly addressed and sent in full to the Notified Address:

Permitted Method	Date on which Notice is deemed given:
Personal delivery	When delivered at the Notified Address during the business hours with proof of acknowledgment.
Registered or registered airmail or courier	10 (ten) Business Days after posting.
Electronic mail	Instantly on receipt.

The “**Notified Addresses**” means the address, for each of the Parties as set out below:

128-Government Polytechnic College, Arakandanallur, Villupuram:

Address	Kandachipuram Main Road, S.Kollur, Arakandanallur Post, Tirukoilur Taluk, Villupuram – 605 752
Phone number	7639183265
Email ID	128gptc@gmail.com
For the attention of:	The Principal

ZF Commercial Vehicle Control Systems India Limited:

Address	Plot No: AA8, Central Avenue, Auto Ancillary SEZ, Mahindra World City, Chengalpet, Tamil Nadu
Email ID	nareshkumar.pugalenti@zf.com
For the attention of:	Senior Manager - HR

Dispute Resolution: Any dispute under this MOU shall be subject to mutual resolution through the office of The Commissioner/Director, DoTE and the office of the Joint Managing Director, INDUSTRY ZF Commercial Vehicle Control Systems India Limited.

Governing Law and Jurisdiction: This MoU shall be governed by and construed in accordance with the laws of India without regard to any conflict of law provisions. Subject to Clause III(9) (Dispute Resolution), the Courts at Chennai shall have exclusive jurisdiction over this MoU.

Severability: If any provision, paragraph, sentence, or word of this MOU is declared void by a Court of competent jurisdiction; then the provision, paragraph, sentence, or word will be severed from this MOU, and the remainder of the MoU will remain in effect.

Counterparts: This MoU may be executed in any number of counterparts and by the Parties to it on separate counterparts, each of which shall be an original but all of which together shall constitute one and the same instrument. The delivery of signed counterparts by facsimile transmission or electronic mail in 'portable document format' (.pdf) shall be as effective as signing and delivering the counterpart in person

IN WITNESS WHEREOF, the undersigned being duly authorized hereto, have signed this MOU.

For ZF Commercial Vehicle Control Systems India Limited: For 128-Government Polytechnic College, Arakandanallur, Villupuram

Signature: _____

Name: NARESH KUMAR P

Designation: SENIOR MANAGER - HR



Signature: _____

Name: RANJITH P

Designation: PRINCIPAL (FAC)

Principal (FAC)
Government Polytechnic College,
Arakandanallur, Villupuram-605752.

WITNESSES

Witness Signature: _____

Name: VASANTH S

Address: MWC, Chengalpet

Witness Signature: _____

Name: VIGNESH B

Address: Training and Placement Office
128 GPTC, Villupuram

Annexure – A

CURRICULUM FOR DIPLOMA MECHANICAL ENGINEERING STUDENTS

SEMESTER V – Part -1

1. Training Boot Camp & Industrial Orientation (2 Weeks)

This module familiarizes students with the work culture, manufacturing practices, quality systems, and safety procedures followed at ZF Group India. Students gain an understanding of the company's organizational structure, manufacturing departments, production workflow, quality objectives, workplace ethics, and environmental management practices. The training emphasizes industrial safety, Personal Protective Equipment (PPE), hazard identification, Lockout/Tagout (LOTO), 5S workplace organization, Lean Manufacturing, Kaizen, and Standard Operating Procedures (SOPs) adopted in automotive manufacturing industries.

Practical sessions include factory orientation, safety demonstrations, machine shop visits, PPE usage, workplace hazard identification, production line observation, and familiarization with automotive component manufacturing processes, preparing students for professional work in an automotive manufacturing environment.

2. Manufacturing Processes & CNC Machining

This module develops knowledge of manufacturing processes used in the production of automotive transmission and driveline components manufactured at ZF Group India. Students learn about raw materials, forging, heat treatment, CNC turning, CNC machining centres, grinding, broaching, gear cutting, honing, deburring, and component finishing processes. Emphasis is given to process planning, machining parameters, tooling systems, cutting fluids, and production workflow.

Practical activities include observation of CNC machining centres, tool identification, machining process monitoring, machine setup, work holding devices, tool offset

verification, production documentation, and exposure to modern manufacturing technologies used in precision automotive component production.

3. Engineering Metrology & Quality Inspection

This module develops the knowledge and practical skills required for dimensional inspection and quality assurance of automotive mechanical components manufactured at ZF Group India. Students learn the use of Vernier calipers, micrometers, dial indicators, height gauges, bore gauges, slip gauges, surface roughness testers, Coordinate Measuring Machines (CMM), and Statistical Process Control (SPC) techniques.

Practical sessions include dimensional inspection of machined components, calibration verification, surface finish measurement, gauge handling, preparation of inspection reports, defect identification, tolerance verification, and documentation practices followed in quality control laboratories supporting automotive manufacturing.

4. Assembly Technology & Production Systems

This module focuses on assembly techniques adopted for automotive transmission, steering, and braking components manufactured at ZF Group India. Students learn assembly sequence planning, torque tightening methods, pneumatic tools, hydraulic presses, bearing assembly, lubrication practices, production line balancing, material handling systems, and production documentation.

Practical exercises include component assembly observation, use of assembly tools, torque wrench applications, assembly inspection, process verification, production line monitoring, workstation organization, and adherence to quality and safety standards followed during automotive component assembly.

5. Quality Systems & Professional Practices

This module introduces the quality management systems and professional practices implemented at ZF Group India. Students gain knowledge of ISO 9001, IATF 16949

automotive quality standards, Total Quality Management (TQM), Lean Manufacturing, Kaizen, Poka-Yoke, Root Cause Analysis (RCA), teamwork, workplace communication, production documentation, traceability, and professional ethics.

Practical activities include quality inspections, preparation of production records, participation in quality improvement activities, defect reporting, production monitoring, documentation practices, and continuous improvement initiatives that support customer satisfaction and manufacturing excellence.

SEMESTER VI – Part II

1. Industrial Maintenance & Total Productive Maintenance (TPM)

This module introduces maintenance practices followed in automotive manufacturing industries. Students learn preventive, predictive, breakdown, and condition-based maintenance techniques, machine lubrication systems, maintenance planning, equipment reliability, TPM pillars, Overall Equipment Effectiveness (OEE), and maintenance documentation.

Practical sessions include preventive maintenance activities, machine inspection, lubrication practices, maintenance scheduling, equipment condition monitoring, fault reporting, maintenance record preparation, and participation in TPM activities that improve manufacturing productivity.

2. Hydraulics, Pneumatics & Industrial Automation

This module focuses on hydraulic and pneumatic systems used in manufacturing automation and assembly lines at ZF Group India. Students study hydraulic pumps, valves, cylinders, pneumatic actuators, FRL units, electro-pneumatic systems, sensors, actuators, PLC fundamentals, and industrial automation concepts.

Practical sessions include hydraulic and pneumatic circuit demonstrations, actuator operation, PLC-controlled automation systems, sensor interfacing, troubleshooting of

automation equipment, and observation of automated production systems used in automotive manufacturing.

3. Production Planning, Lean Manufacturing & Industry 4.0

This module provides comprehensive knowledge of production planning and modern manufacturing practices adopted at ZF Group India. Students learn Production Planning and Control (PPC), inventory management, Just-In-Time (JIT), Kanban, Value Stream Mapping (VSM), Lean Manufacturing, Six Sigma awareness, digital manufacturing, Industrial Internet of Things (IIoT), and smart factory concepts.

Practical sessions include production scheduling, workflow observation, inventory monitoring, lean implementation activities, productivity improvement studies, digital production monitoring, and Industry 4.0 applications used in modern automotive manufacturing.

4. Automotive Component Testing & Failure Analysis

This module develops competency in testing and analysing automotive mechanical components manufactured at ZF Group India. Students study functional testing methods, endurance testing, vibration testing, hardness testing, balancing, fatigue analysis, failure analysis, Root Cause Analysis (RCA), and corrective action procedures.

Practical training includes component inspection, hardness testing, balancing demonstrations, defect analysis, preparation of failure reports, testing documentation, and participation in quality improvement activities supporting reliable automotive component production.

5. Final Assembly, Project & Professional Development

This module provides comprehensive training in final assembly operations, production documentation, quality verification, and project implementation. Students learn final inspection procedures, traceability systems, production reporting, customer quality

requirements, workplace communication, professional ethics, presentation skills, and career readiness.

Practical sessions include final assembly observation, production documentation, quality audits, technical report preparation, productivity improvement projects, internship presentations, and an industry-based project aligned with ZF manufacturing practices. This module prepares students for careers in automotive manufacturing, CNC production, quality assurance, maintenance, industrial automation, and smart manufacturing technologies

Programme Outcome

- PO1** Apply engineering knowledge to solve mechanical engineering problems.
- PO2** Analyze manufacturing and production problems using engineering principles.
Apply manufacturing processes, maintenance practices, and quality systems
- PO3** for industrial productivity.
Use modern manufacturing equipment, CNC machines, precision measuring
- PO4** instruments, CAD/CAM, PLCs, and automation systems effectively.
- PO5** Follow industrial safety, environmental regulations, quality standards, and professional ethics.
- PO6** Work effectively as an individual and as a member of multidisciplinary teams.
- PO7** Communicate effectively through technical reports, presentations, documentation, and lifelong learning.

Mapping of Internship Outcomes with Programme Outcomes (Semester V)

COs \ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1: Industrial Safety & Orientation	2	2	1	2	3	2	2
CO2: Manufacturing Processes & CNC Machining	3	3	3	3	2	2	2
CO3: Engineering Metrology & Quality Inspection	3	3	2	3	3	2	2
CO4: Assembly Technology & Production Systems	3	3	3	3	2	2	2
CO5: Quality Systems & Professional Practices	2	2	2	2	3	3	3

Mapping of COs – Knowledge Gained – Skill Gained – Job Roles (Semester V)

COs	Knowledge Gained	Skill Gained	Job Roles
CO1: Industrial Safety & Orientation	Industrial safety, PPE, LOTO, 5S, Lean Manufacturing, workplace discipline, production organization and safety regulations.	Follow safety procedures, identify workplace hazards, use PPE correctly and practice safe working methods.	Safety Assistant, Production Trainee, Shop Floor Assistant
CO2: Manufacturing Processes & CNC Machining	Manufacturing processes, CNC turning, machining centres, tooling systems, cutting parameters, forging, heat treatment and production planning.	Assist in CNC machining, identify tools, monitor machining operations, interpret process sheets and support production.	CNC Operator Trainee, Production Technician, Manufacturing Assistant
CO3: Engineering Metrology & Quality Inspection	Precision measuring instruments, tolerances, SPC, CMM, ISO 9001 and IATF 16949 quality systems.	Perform dimensional inspection, use Vernier calipers, micrometers, bore gauges and prepare inspection reports.	Quality Inspector, Metrology Technician, QA Assistant
CO4: Assembly Technology &	Automotive assembly processes, torque	Assemble automotive	Assembly Technician,

Production Systems	tightening, pneumatic tools, production flow, assembly documentation and material handling.	components, use assembly tools, inspect assembled parts and support assembly line operations.	Production Operator, Manufacturing Technician
CO5: Quality Systems & Professional Practices	Lean Manufacturing, Kaizen, Poka-Yoke, workplace communication, teamwork, production documentation and professional ethics.	Maintain production records, participate in Kaizen activities, prepare reports and work effectively in teams.	Production Assistant, Quality Technician, Manufacturing Associate

SEMESTER VI

Mapping of Internship Outcomes with Programme Outcomes

COs \ POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1: Industrial Maintenance & TPM	3	3	3	3	2	2	2
CO2: Hydraulics, Pneumatics & Automation	3	3	3	3	2	2	2
CO3: Production Planning, Lean Manufacturing & Industry 4.0	3	3	3	3	3	2	3
CO4: Automotive Component Testing & Failure Analysis	3	3	3	3	3	2	2
CO5: Final Assembly, Project & Professional Development	2	2	3	2	3	3	3

Mapping of COs – Knowledge Gained – Skill Gained – Job Roles (Semester VI)

COs	Knowledge Gained	Skill Gained	Job Roles
CO1: Industrial Maintenance & TPM	Preventive maintenance, predictive maintenance, TPM, OEE, lubrication systems, maintenance	Perform maintenance inspections, lubrication, equipment monitoring and prepare	Maintenance Technician, TPM Assistant, Plant Maintenance Technician

	planning and equipment reliability.	maintenance documentation.	
CO2: Hydraulics, Pneumatics & Automation	Hydraulic systems, pneumatic systems, PLC basics, industrial sensors, actuators and automation systems.	Identify automation components, troubleshoot hydraulic and pneumatic circuits and assist in automated production systems.	Automation Technician, Hydraulic Technician, Pneumatic Maintenance Technician
CO3: Production Planning, Lean Manufacturing & Industry 4.0	PPC, inventory management, JIT, Kanban, Lean Manufacturing, Six Sigma awareness, IIoT and smart factory concepts.	Prepare production schedules, monitor inventory, participate in Lean projects, improve productivity and use digital manufacturing tools.	Production Planning Assistant, Lean Manufacturing Technician, Industry 4.0 Associate
CO4: Automotive Component Testing & Failure Analysis	Functional testing, hardness testing, balancing, vibration analysis, fatigue testing, Root Cause Analysis (RCA) and corrective actions.	Conduct component testing, identify defects, analyse failures, prepare test reports and support quality improvement activities.	Testing Technician, Quality Assurance Technician, Failure Analysis Technician
CO5: Final Assembly, Project & Professional Development	Final assembly processes, traceability, production documentation, customer quality requirements, project management and professional ethics.	Complete industrial projects, prepare technical reports, deliver presentations, work in teams and support final product assembly.	Graduate Engineer Trainee, Production Engineer Trainee, Assembly Supervisor Trainee, Quality Engineer Trainee

Annexure – B
EVALUATION SCHEME

(Applicable separately to Semester V and Semester VI)

	Evaluation	Assessed By	Max Marks	Marks
Part- 1	Mid Term Evaluation (At industry)	Industry Supervisor	20	40
		Faculty Mentor	20	
Part-2	End Semester exam (At industry)	Industry Supervisor	20	60
		Internal and external examiner	40	
Total				100

Mid Term Evaluation (At industry) (40 Marks)			
Industry Supervisor		Faculty Mentor	
Evaluation Criteria Attributes*	Max. Marks	Evaluation Criteria Attributes*	Max. Marks
1. Technical Skill Mastery	12	1. Daily activity record (Handbook + Digital record)	5
2. Quality of Work	5	2. Practical Skill Demonstration	
3. Attitude towards work	3	a. Technical Skill mastery	10
		b. Adherence to Safety/ Policy	3
		c. Viva voce	2
Total	20	Total	20

End Semester exam (At industry) (60 marks)			
Industry Supervisor		Internal and external examiner	
Evaluation Criteria Attributes*	Max. Marks	Evaluation Criteria Attributes*	Max. Marks
1. Technical Skill Mastery	10	1. Practical Skill Demonstration	

2. Adherence to Safety/Policy	2	a. Technical Skill mastery	10
3. Planning, Reliability, Teamwork & Communication	4	b. Safe & Proper Tool Use	10
5. Attendance	4	2. Industrial Training E-Portfolio	20
Total	20	Total	40

Part 1: Mid Term Evaluation (At industry) (Total: 60 Marks)

A. Industry Supervisor's Assessment (Total: 20 Marks)

Evaluation Criteria Attributes*	Max. Marks	Rubrics
1. Technical Skill Mastery	12	Excellent (9–12): Independently applies technical knowledge and skills, completes work accurately. Good (6–8): Minor errors, occasional guidance needed. Satisfactory (3–5): Frequent guidance required, partially correct result. Needs Improvement (0–2): Major errors, incomplete or wrong output.
2. Quality of Work	5	Excellent (4–5): Output error-free, neatly presented, meets industry/lab standards. Good (3): Minor deviations, mostly correct. Satisfactory (2): Work partially correct, lacks neatness. Needs Improvement (0–1): Incomplete, unclear, major errors.
3. Attitude towards work	3	Excellent (3): Positive, proactive, adaptable, eager to learn. Good (2): Cooperative, minor lapses. Satisfactory (1): Passive, waits for instruction. Needs Improvement (0): Negative or careless attitude.
Total	20	

B. Faculty mentor's Assessment (Total: 20 Marks)

Evaluation Criteria Attributes*	Max. Marks	Rubrics
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1. Daily activity record (Handbook + Digital record)	5	Excellent (4–5): Daily entries, detailed observations, signed by supervisor. Good (3): Mostly regular, minor gaps. Satisfactory (2): Irregular, missing details. Needs Improvement (0–1): Very few entries.
Practical Skill demonstration		
Technical Skill mastery	10	Excellent (9–12): Independently applies technical knowledge and skills, completes work accurately. Good (6–8): Minor errors, occasional guidance needed. Satisfactory (3–5): Frequent guidance required, partially correct result. Needs Improvement (0–2): Major errors, incomplete or wrong output.
Adherence to Safety/Policy	3	Excellent (3): Always follows rules, safety, lab/industry policies. Good (2): Rare lapses, quickly corrects after warning. Satisfactory (1): Multiple reminders required, careless behaviour seen. Needs Improvement (0): Frequent violations of safety rules, risky behaviour.
Viva voce	2	Excellent (2): Explains procedure, theory, and result clearly with confidence. Good (1): Explains most questions, few mistakes. Needs Improvement (0): Cannot answer or explain work.
Total	20	

Part 2: End Semester Exam [At industry] (Total: 60 Marks)

A. Industry Supervisor's Assessment (Total: 20 Marks)

valuation Criteria	Max. Marks	Rubrics
Attributes*		

1. Technical Skill Mastery	10	Excellent (9–12): Independently applies technical knowledge and skills, completes work accurately. Good (6–8): Minor errors, occasional guidance needed. Satisfactory (3–5): Frequent guidance required, partially correct result. Needs Improvement (0–2): Major errors, incomplete or wrong output.
2. Adherence to Safety/Policy	2	Excellent (3): Always follows rules, safety, lab/industry policies. Good (2): Rare lapses, quickly corrects after warning. Satisfactory (1): Multiple reminders required, careless behaviour seen. Needs Improvement (0): Frequent violations of safety rules, risky behaviour.
3. Planning, Reliability, Teamwork & Communication	4	Excellent (4): Plans task sequence, meets deadlines, collaborates, communicates progress proactively. Good (3): Mostly plans well, minor lapses in communication. Satisfactory (2): Requires supervision for planning, weak communication. Needs Improvement (0–1): Cannot coordinate with team, misses deadlines.
4. Attendance	4	Excellent (4): >95% attendance, always on time. Good (3): 85–94% attendance, mostly punctual. Satisfactory (2): 75–84% attendance, sometimes late. Needs Improvement (0–1): <75% attendance, frequent absences.
Total	20	

B. Internal and external examiners' Assessment (Total: 40 Marks)

Evaluation Criteria Attributes*	Max. Marks	
1. Practical Skill Demonstration		
a. Technical Skill mastery	10	Excellent (9–12): Independently applies technical knowledge and skills, completes work accurately. Good (6–8): Minor errors, occasional guidance needed. Satisfactory (3–5): Frequent guidance required, partially correct result. Needs Improvement (0–2): Major errors, incomplete or wrong output.
b. Safe & Proper Tool Use	10	Excellent (8–10): Uses lab/industry tools safely, correctly, and efficiently. Good (6–7): Minor procedural mistakes, corrects quickly. Satisfactory (4–5): Multiple mistakes, needs supervision. Needs Improvement (0–3): Unsafe handling or misuse.
2. Industrial Training E-Portfolio	20	Excellent (16–20): Covers company intro, projects, skills learned, challenge faced, key takeaways with proper images/videos; professional and complete. Good (11–15): Mostly covers sections, minor gaps. Satisfactory (6–10): Partial coverage, limited reflection. Needs Improvement (0–5): Very minimal effort, missing key sections.
Total	40	

***Refer the detailed attributes below**

EVALUATION CRITERIA ATTRIBUTES

TECHNICAL SKILL MASTERY: The technical skills learned by the student is tested by making them perform hands-on tasks in industry. Students will be allotted 20 minutes to develop a brief process plan and demonstrate a sequence of skills acquired during training. For the mid-term assessment, students are required to perform a minimum of three skills, while for the end-term assessment, they must demonstrate at least six skills. For instance, for mechanical students, the evaluation shall be based on the following:

- The ability to demonstrate proficiency in executing core manufacturing processes (e.g., machining, fitting, assembly etc; whichever is appropriate to the industry) to create components that conform to engineering drawings and quality standards,

Sample questions

1. Given the engineering drawing and a material for a component, your task is first to analyze the drawing to create a sequence of operations plan. Next, you must perform the required machining operations to manufacture the component. Finally, conduct a full quality inspection and document if the part meets all specified tolerances.
2. Given a standard aluminum extrusion for a solar panel frame, your task is to analyze the drawing to determine the correct cut length and hole positions. You must then cut the extrusion to size and drill the mounting holes using a fixture. Your final task is to perform a quality check on the finished frame piece for length, straightness, and positional accuracy of the holes

QUALITY OF WORK: The ability to demonstrate overall workmanship of the finished product, including its surface finish, absence of defects, adherence to tolerances, accuracy and finish requirements.

ATTITUDE TOWARDS WORK: The ability to maintain a professional and constructive attitude, demonstrating initiative, adaptability, and a commitment to continuous learning in an industrial environment.

DAILY ACTIVITY RECORD (HANDBOOK + DIGITAL RECORD): The ability to meticulously document daily work activities, technical observations, and skills learned in the dual-format (handbook and digital) to ensure a systematic record of progress. The handbook to be duly submitted to the industrial supervisor on a daily basis for review, feedback, and signature.

TIME MANAGEMENT, RELIABILITY, TEAM WORK & COMMUNICATION:
The ability to demonstrate professional conduct by reliably managing tasks to meet deadlines and collaborating effectively as part of a team. This includes maintaining clear communication with colleagues and supervisors to show accountability and a commitment to shared goals.

INDUSTRIAL TRAINING E-PORTFOLIO:

1. Student is required to create either a **blog** (a series of written posts with images) or a **vlog** (a single, well-edited video) that documents and reflects upon their entire six-month industrial training. The student must maintain a professional tone and not disclose any confidential company information or trade secrets thus respecting the company's privacy policy. The student shall not show any confidential company documents, designs, or processes on screen.
2. Students will submit a single, publicly accessible link to their blog or vlog. They shall use free blog platforms such as blogger, medium etc and free vlog platforms such as youtube, vimeo etc.
3. The link name has to be created in the following format and shared with the faculty for assessment

collegecode_departmentcode_registernumber
(eg: 101_1020_2011230001)

The blog or vlog must cover the following five key areas:

1. Introduction to the Company & Role of the student: Brief introduction of the company, its industry, and the specific department the student worked in. The job title and the primary objectives of the internship to be clearly stated.

2. Key Projects & Responsibilities: Detail 2-3 of the most significant projects or tasks that the students were involved in. Describe the project's goal, their specific responsibilities, the processes followed, and the final outcome.
3. Skills Showcase: Create a dedicated section that details the skills acquired.
 - Technical Skills: Mention specific software, machinery, manufacturing processes (e.g., turning, quality inspection), and analytical methods learned.
 - Professional Skills: Discuss growth in areas like teamwork, communication, time management, and problem-solving.
4. A Significant Challenge: Describe a specific technical or professional challenge the student faced. Explain how they analyzed the situation and the steps they took to overcome it.
5. Conclusion & Key Takeaways: Summarize their overall experience. Reflect on the most important learnings and explain how this internship will influence their future career path and the job roles they are ready for.

Technical Guidelines to be followed for blog and vlog Creation

- For a Blog :
 - Platform: Use a free platform like Blogger or Medium.
 - Structure: Create a minimum of 4-5 separate posts with images.
 - Length: Each post should be approximately 200-400 words.
 - Media: Relevant images, diagrams, or charts must be included.
 - For a Vlog :
 - Platform: The video to be uploaded to YouTube or Vimeo as an "unlisted" link.
 - Length: The final video should be 8-12 minutes long.
 - Structure: Use clear titles, chapters, or timestamps in the description to navigate between the five content areas.
 - Media: The video should be well-edited, with clear audio, and include footage, images, or screen recordings where appropriate.
- Below is the example template for blog and vlog:

Blog Template (4-5 Posts)

- **Post 1: Internship Launchpad: Introduction to [Company Name]**
 - **About the Company:** Briefly describe what the company does, its industry, and its main products/services.
 - **Job Role:** The job title and the primary responsibilities and objectives of the internship to be discussed in detail.
 - **First Impressions:** Initial goals and expectations to be explained. The technical and professional skills that the students aimed to develop must be discussed.
- **Post 2: Engineering in Action: Projects & Contributions**
 - A detailed look at 2-3 of the most significant projects or tasks should be provided. For each one, describe:
 - **The Goal:** What was the purpose of the project?
 - **My Contribution:** What were the specific tasks and steps?
 - **The Outcome:** What was the result? (e.g., a finished component, a test report, an improved process).
- **Post 3: The Learning Curve: My New Skillset**
 - **Technical Toolbox:** Use a bulleted list to showcase the technical skills acquired (e.g., "CNC Programming on Fanuc controls," "Matlab toolbox" "Database connection" "Quality inspection" "Process planning").
 - **Professional Polish:** Growth in professional areas like communication, teamwork, problem-solving, and time management to be discussed. Give a specific example. Share a situation that demonstrate team work and other soft skills. Explain how communication skill improved while interacting with supervisor and team.
- **Post 4: Facing a Challenge: A Problem Solved**
 - **The Situation:** Describe a specific technical or workplace challenge encountered.
 - **The Action:** Explain the steps taken to analyze and resolve the issue.
 - **The Lesson:** What was learnt from the experience?

- **Post 5: Looking Ahead: Final Reflections**

- Summarize the key takeaways from the six-month journey.
- Explain how the internship has shaped career aspirations.