

**Programme
Name/s**

**: Automobile Engineering./ Artificial Intelligence/ AI
Intelligence and Machine Learning/ Automation and
Cloud Computing and Big Data/ Civil Engineering/ C
Engineering/ Computer Technology/
Computer Engineering/ Civil & Rural Engineering/ C
Technology/ Computer Software Technology/
Computer Science & Engineering/ Digital Electroni
Sciences/ Electrical Engineering/
Electronics & Tele-communication Engg./ Electrical
Electronics Engineering/ Electrical Power System/ E
Communication Engg./
Electronics Engineering/ Computer Hardware & Ma
Industrial Electronics/ Information Technology/
Computer Science & Information Technology/ Civil
Environmental Engineering/ Mechanical Engineering
Mechatronics/
Manufacturing Technology/ Metallurgical Engineer
Engineering/ Computer Science/
Electronics & Computer Engg.**

**Programme
Code**

**: AE/ AI/ AN/ AO/ BD/ CE/ CH/ CM/ CO/ CR/ CS/ CST/
EE/ EJ/ EK/
EP/ ET/ EX/ HA/ IE/ IF/ IH/ LE/ ME/ MK/ MRT/ MY/ I**

Semester

: Fifth

Course Title

: INTERNSHIP(12 WEEKS)

Course Code

: 315004

I. RATIONALE

Globalization has prompted organizations to encourage skilled and innovative workforce. Internships are educational and career development opportunities, providing practical discipline. Summer internship is an opportunity for students to get accustomed to modern industry practices, apply the knowledge and skills they've acquired in the classroom, and become familiar with industry environments before they enter the professional world. Keeping this in mind, industrial training is incorporated to all diploma programmes as well as with practical skills, soft skills and life skills

II. INDUSTRY / EMPLOYER EXPECTED OUTCOME

The aim of this course is to help the student to attain the following industry identified competency through various teaching learning experiences: Apply skills and practices to

III. COURSE LEVEL LEARNING OUTCOMES (COS)

Students will be able to achieve & demonstrate the following COs on completion of course based learning

- CO1 - Observe time/resource management and industrial safety aspects
- CO2 - Acquire professional experience of industry environment .
- CO3 - Establish effective communication in working environment.
- CO4 - Prepare report of assigned activities and accomplishments.

IV. TEACHING-LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Abbr	Course Category/ s	Learning Scheme	Credits	Assessment
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				Actual Contact Hrs./Week			SLH	NLH		Paper Duration	Theory			
				CL	TL	LL					FA-TH	SA-TH	Total	
													Max	Max
315004	INTERNSHIP(12 WEEKS)	ITR	INP	-	-	-	-	36 - 40	10	-	-	-	-	1

Legends: # External Assessment

Note: Credits for Industrial Training are in-line of guidelines of NCERT. The duration of industrial training is of 12 weeks considering 36-40 hours per week of students (as per Guidelines of GR of Maharashtra Govt.) under Section 10(1)(c) with guidance of industry supervisor / Mentor

V General guidelines for organizing Industrial training

The Industry/organization selected for Industrial training/ internships shall be Government/Public Limited/ Private limited / Startup /Centre of Excellence/Skill Centers/Skill Park

1. Duration of Training - 12 weeks students engagement time
2. Period of Time slot - Between 4th and 5th semester (12 weeks) i.e. commencement of internships will be immediately following the 4th semester exams.
3. Industry area - Engineering Programme Allied industries of large, medium or small-scale, Organization/Govt./ Semi Govt Sectors.

VI Role(s) of Department at the Institute:

Following activities are expected to be performed by the concerned department at the Polytechnics.

Table of activities to be completed for Internship

S.No	Activity	Suggested Week
1	Collection of information about industry available and ready for extending training with its offered capacity of students (Sample Format 1)	
2	Allocations of Student and Mentor as per availability (Mentor: Student Ratio (1:15))	
3	Communication with Industry and obtaining its confirmation Sample letter Format	
4	Securing consent letter from parents/guardians of students (Sample Format 2)	
5	Enrollment of Students for industrial training (Format 3)	
6	Issue of letter to industry for training along with details of students and mentor (Format 4)	
7	Organize Internship Orientation session for students	

8	Progressive Assessment of industry training by Mentor
9	Assessment of training by institutional mentor and Industry mentor

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Suggestions-

1. Department can take help of alumina or parents of students having contact in different industries for securing placement.
2. Students would normally be placed as per their choices, in case of more demand for a particular industry, students would be allocated considering their potentials. Placement should be given to students who have arranged placement in company with the help of their parents or relatives.
3. Principal/HOD/Faculty should address students about industrial safety norms, rules and discipline to be maintained in the industry during training before relieving students.
4. The faculty members during the visit to industry or sometimes through online mode will check the progress of the student in the training, student attendance, discipline every week.

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VII Roles and Responsibilities of students:

1. Students may interact with the mentor to suggest choices for suitable industry, if any. If students have any contact in industry through their parents or relatives then they should get placement for themselves and their peers.
2. Students have to fill the forms/formats duly signed by institutional authorities along with a training letter and submit it to a training officer/mentor in the industry or college.
3. Students must carry with him/her Identity card issued by the institute during the training period.
4. Students should follow industrial dressing protocols, if any. In absence of specific protocol students must wear college uniform compulsorily.
5. Students will have to get all necessary information from the training officer/mentor at industry regarding schedule of training, rules and regulation of the industry and they are expected to observe these rules, regulations and procedures.
6. Students must be fully aware that if they disobey any rule of industry or do not follow the discipline then non-disciplinary action will be taken.
7. Students must maintain a weekly diary (**Format 6**) by noting daily activities undertaken and get it duly signed from industry mentor or Industrial training officer.
8. In case students face any major problems in industry such as an accident or any disciplinary issue then they should immediately report the same to the mentor at industry.
9. Prepare a final report about the training for submitting to the department at the time of presentation and viva-voce and get it signed from a mentor as well as industry mentor.
10. Students must submit the undertaking as provided in **Format 5**.

VIII Typographical guidelines for Industry Training report

Following is the suggestive format for preparing the training report. The training report may differ slightly depending upon the nature of industry. The training report may contain the following

1. The training report shall be computer typed (English- British) and printed on A4 size paper.
2. Text Font -Times New Roman (TNR), Size-12 point
3. Subsection heading TNR- 12 point bold normal
4. Section heading TNR- 12 capital bold
5. Chapter Name/ Topic Name " TNR- 14 Capital
6. All text should be justified. (Settings in the Paragraph)
7. The report must be typed on one side only with double space with a margin 3.5 cm on the left, 2.5 cm on the top, and 1.25 cm on the right and at bottom.
8. The training report must be hardbound/ Spiralbound with a cover page in black color. The name of the candidate, diploma (department), year of submission, name of the institute should be on the cover.
9. The training report, the title page should be given first then the Certificate followed by the acknowledgment and then contents with page numbers.

IX Suggestive format of industrial training report

Following format may be used for training report. Actual format may differ slightly depending upon the nature of Industry/ Organization.

- Title Page
- Certificate
- Abstract
- Acknowledgement

• Content Page

Chapter 1	Organization structure of Industry and general layout.
Chapter 2	Introduction to Industry / Organization (history, type of products and services, turn over and number of employees etc.)
Chapter 3	Types of Major Equipments/raw materials/ instruments/machines/ hardware/software used in industry with their specifications, ap maintenance done
Chapter 4	Processes/ Manufacturing Manufacturing techniques and methodologies and material handling procedures
Chapter 5	Testing of Hardware/Software/ Raw materials/ Major material handling product (lifts, cranes, slings, pulleys, jacks, conveyor belts
Chapter 6	Safety procedures followed and safety gears used by industry.
Chapter 7	Particulars of Practical Experiences in Industry/Organization if any in Production/Assembly/Testing/Maintenance
Chapter 8	Detailed report of the tasks undertaken (during the training).
Chapter 9	Special/challenging experiences encountered during training if any (may include students liking & disliking of workplaces).
Chapter 10	Conclusion
Chapter 11	References / sources of information

X Suggested learning strategies during training at Industry

- Students should visit the website of the industry where they are under collect information about products, processes, capacity, number of em etc.
- They should also refer to the handbook of the major machines and ope quality control and testing manuals.
- Students may also visit websites related to other industries wherein si are being manufactured.

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XI Tentative week wise schedule of Industry Training

Industrial training is a common course to all Diploma programmes , therefore the industry selection will depend upon the nature of the programme and its related industry. T nature and size of industry.

The following table details of activities to be completed during industrial training.

Details of Activities to be completed during Industry training
Introduction of Industry and departments.
Study of Layout of Industry, Specifications of Machines , raw materials, components available in the industry
Study of setup and manufacturing processesÂ
Execute given project or work assigned to the students, study of safety and maintenance procedures
Validation from industry mentor regarding project or work allocated
Report writing

XII CO-PO Mapping Table to be created by respective Department

XIII. Formative Assessment of training : Suggested RUBRIC (Note : Allot the marks in proportion of presentations and outcome Marks excluding component of week 11 are to be filled by Institute)

Week No	Task to be assessed	Outcome Achievement - Poor	Outcome Achievement - Moderate	Outcome Achievement - High	
		Poor Marks	Average Marks	Good Marks	Excellent Marks
1	Introduction of Industry	Minimal Knowledge of Departments, processes, products and work culture of the company (Marks 1)	Moderate Knowledge of Departments, processes, products and work culture of the company (Marks 2)	Good Knowledge of Departments, processes, products and work culture of the company (Marks 3/4)	Extensive Knowledge of Departments, processes, products and work culture of the company (Marks 5)
2	Presentation of Layout of Industry, Specifications of Machines, raw materials, components available in the industry	Minimal w.r.t. tasks (Marks 1)	Moderate w.r.t. tasks (Marks 2)	Good w.r.t. tasks (Marks 3/4)	Extensive w.r.t. tasks (Marks 5)
3	Participation in setup and manufacturing processes/platforms	Minimal Participation with poor understanding (Marks 1-8)	Moderate Participation with poor understanding (Marks 9-12)	Good Participation with poor understanding (Marks 13-17)	Extensive Participation with poor understanding (Marks 18-20)
4 to 10	Execution of given project or work to the students, Follow of safety and maintenance procedures	Minimal Participation with poor understanding (Marks 1-8)	Moderate Participation with lower level understanding (Marks 9-12)	Good Participation with Good understanding (Marks 13-17)	Extensive Participation with Good understanding (Marks 18-20)
11	Validation by industry mentor regarding project or work allocated	Minimal Participation with poor performance (Marks 1-10)	Moderate Participation with acceptable performance (Marks 11-15)	Good Participation with Good performance (Marks 16-20)	Extensive Participation with acceptable performance (Marks 21-25)

XV FORMATS

Format-1: Collecting Information about Industry/Organization available for providing industrial training along with capacity

1) Name of the industry/organization:

2) Address/communication details with email :

3) Contact person details:

a) Name:

b) Designation:

c) Email

d) Contact number/s:

4) Type:

Govt / PSU / Pvt /

Large scale / Medium scale / Small scale

5) Products/services offered by industry:

a) Whether willing to offer Industrial training facility during May/ June for Diploma in Engineering students: **Yes / No.**

b) If yes, whether you offer 12 weeks training: **Yes/No**

c) Possible Industrial Capacity:

Students	Programme name/ Title				
	Civil	Mechanical	Chemical		
Male					
Female					
Total					

7) Whether accommodation available for interns: **Yes / No.**

If yes capacity: _____

8) Whether internship is charged or free:

If charged please specify amount per candidate: _____

Signature of responsible person at Industry:

Format-2: Obtaining Consent Letter from parents/guardians

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To,

À The Principal,

Subject: Consent for Industrial Training.

Sir/Madam,

I am fully aware that -

À Á Â Ã Ä Å i) My ward studying in _____ semester at your _____ institute has to undergo 12 weeks of Industrial training for partial fulfillment of Diploma in _____ Engineering.

À Á Â Ã Ä Å ii)À For this fulfillment he/she has been deputed at _____ industry, located at _____ for Industrial training /internship from _____ to _____ .

With respect to above I give my full consent for my ward to travel to and from the mentioned industry. Further I undertake that “

- a) My ward will undergo the training at his/her own cost and risk during training and/or stay.
- b) My ward will be entirely under the discipline of the organization where he/she will be placed and will abide by the rules and regulations in face of the said organization.
- c)À My ward is NOT entitled to any leave during the training period.
- d) My ward will regularly submit a prescribed weekly diary, duly filled and countersigned by the training supervisor of the organization to the mentor faculty of the polytechnic.

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I have explained the contents of the letter to my ward,À who has also promised to adhere strictly to the requirements. I assure that my ward will be properly instructed to take care to avoid any injuries in the industry. In case of any accident neither industry nor the institute will be held responsible.

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Format-4: Issue Letter to the Industry/Organization for the training details of students and mentors

À Á À Á À To,

À Á À Á À The HR Manager,

À Á À Á À _____

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À Á À Á À Á À Á À Á À Á À Á À Á À Á À Á À Á À Subject: Placement for Industrial training ofÀ ____ weeks in your organizationÀ€!.

À Á À Á À Á À Á À Á À Á À Á À Á À Á À Á À Á À Reference:À Your consent letter no: À€!.

À Á À Á À Sir,

À Á À Á À Á À With reference to the above we are honored to place the following students from this institute for Industrial training in your esteemed organization as per

The purpose of this training is to equip the student with some essential skills relevant to the demands of the industry and world of work, as well as to provide exposure to the culture. It is hoped that this training may enhance his/her employability and livelihood opportunities. In view of the above, we kindly request your support in facilitating this. The student has been adequately oriented and guided on the expectations of this training, including the maintenance of a daily diary during the training period. Additionally, the institute undertakes from the parent/guardian regarding the guidelines for exit training. In view of all the above industry shall refrain from involving students into the mundane and haphazard work in this regard will be highly appreciated.

Diploma programme in _____ Engg.

Sr.No	Enrollment No	Name of Student	Name and designation
À	À	À	À
À	À	À	À
À	À	À	À

Diploma programme in _____ Engg.

Sr.No	Enrollment No	Name of Student	Name and Designation
À	À	À	À
À	À	À	À
À	À	À	À

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Kindly extend all possible cooperation to the students for above.

Thanking youÀ

Yours sincerely,

(Principal)

Cc- To HoD/Mentor

Name of the Institute:
with Seal

Format-6: Internships Daily Diary

Name of the Student: _____ Name of the mentor (Faculty) : _____
 Enrollment Number: _____ Semester: _____ Academic Year _____

Week	Day & Date	Discussion Topics/Activity	Details of Work Allotted Till Next Session /Corrections Suggested/ Faculty Remarks
Week 01	Mon, Date		
	Tue, Date		
	Wed, Date		
	Thu, Date		
	Fri, Date		
	Sat, Date		
Week n	Mon, Date		
	Tue, Date		
	Wed, Date		
	Thu, Date		
	Fri, Date		
	Sat, Date		