: Automobile Engineering./ Artificial Intelligence/ Artificial Intelligence and Machine Learning/ Automation and Robotics/

Course Code: 315004

Cloud Computing and Big Data/ Civil Engineering/ Chemical Engineering/ Computer

Technology/

Computer Engineering/ Civil & Rural Engineering/ Construction Technology/

Computer Science & Engineering/

Digital Electronics/ Data Sciences/ Electrical Engineering/ Electronics & Tele-

Programme Name/s

communication Engg./

Electrical and Electronics Engineering/ Electrical Power System/ Electronics &

Communication Engg./ Electronics Engineering/

Computer Hardware & Maintenance/ Industrial Electronics/ Information Technology/

Computer Science & Information Technology/

Civil & Environmental Engineering/ Mechanical Engineering/ Mechatronics/

Production Engineering/

Computer Science/ Electronics & Computer Engg.

Programme Code

: AE/ AI/ AN/ AO/ BD/ CE/ CH/ CM/ CO/ CR/ CS/ CW/ DE/ DS/ EE/ EJ/ EK/ EP/

ET/EX/HA/IE/IF/IH/LE/ME/MK/PG/SE/TE

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/ hands-on experience in a field or 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 to real-world situations 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 it enables the student to get equipped 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 industrial processes.

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

				L	earı	ning	Sche	eme		Assessment Scheme				71							
Course Code	Course Title	Abbr	Course Category/s	Co Hrs	ctua onta ./W	ct eek		NLH	Credits	Paper Duration		The	ory		Base		LL &	: TL	Base S	L	Total Marks
	105. 1			\mathbf{CL}	TL	LL				Duration	FA- TH		Tot	tal	FA-	PR	SA-	PR	SL		IVIAI KS
											Max	Max	Max	Min	Max	Min	Max	Min	Max	Min	
14 15000	INTERNSHIP(12 WEEKS)	ITR	INP	-		-	1	36 - 40	10	ı	-	1	-	1	100	40	100#	40			200

Legends: # External Assessment

Note: Credits for Industrial Training are in-line of guidelines of NCrF: The industrial training is of 12 weeks considering 36-40 hours per week engagement of students (as per Guidlines of GR of Maharashtra Govt.) under Self Learning 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 Parks etc.

- 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 Schedule WEEKS
	Collection of information about industry available and ready for extending training with its offered capacity of students (Sample Format 1)	1 st to 3 rd week of 4 th Semester
2	Allocations of Student and Mentor as per availability (Mentor: Student Ratio (1:15)	4 th to 6 th week of 4 th semester
3	Communication with Industry and obtaining its confirmation Sample letter Format	6 th to 8 th week of 4 th semester
4	Securing consent letter from parents/guardians of students (Sample Format 2)	Before 10 th week of 4 th semester
5	Enrollment of Students for industrial training (Format 3)	Before 12 th week of 4 rd semester
6	Issue of letter to industry for training along with details of students and mentor (Format 4)	Before 14 th week of 4 th Semester
7	Organize Internship Orientation session for students	Before end of 4 th Semester
8	Progressive Assessment of industry training by Mentor	Each week during training period
9	Assessment of training by institutional mentor and Industry mentor	5 th Semester ESE

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. However preference for placement would 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 for training.
- 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, and project report preparation each week.

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 the same may be utilized for securing 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 on the first day of training.
- 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 safety norms to be followed. Students 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 in charge.
- 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 the institute.
- 9. Prepare a final report about the training for submitting to the department at the time of presentation and vivavoce and get it signed from a mentor as well as industry training in charge.
- 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. Actual 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 shall be printed 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.
Chanton 2	Introduction to Industry / Organization (history, type of products and services, turn over and
Chapter 2	number of employees etc.)
	Types of Major Equipments/raw materials/ instruments/machines/ hardware/software used in
Chapter 3	industry with their specifications, approximate cost, specific use and routine maintenance
	done
Chanton 1	Processes/ Manufacturing Manufacturing techniques and methodologies and material
Chapter 4	handling procedures
Chanton 5	Testing of Hardware/Software/ Raw materials/ Major material handling product (lifts, cranes,
Chapter 5	slings, pulleys, jacks, conveyor belts etc.) and material handling procedures.
Chapter 6	Safety procedures followed and safety gears used by industry.
Chantan 7	Particulars of Practical Experiences in Industry/Organization if any in
Chapter 7	Production/Assembly/Testing/Maintenance
Chapter 8	Detailed report of the tasks undertaken (during the training).
Charton 0	Special/challenging experiences encountered during training if any (may include students
Chapter 9	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 undergoing training to collect information about products, processes, capacity, number of employees, turnover etc.
- They should also refer to the handbook of the major machines and operations, testing, quality control and testing manuals.
- Students may also visit websites related to other industries wherein similar products are being manufactured.

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. The training activity may vary according to 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

Course Code: 315004 Study of setup and manufacturing processes

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/faculty.

XIII. Formative Assessment of training: Suggested RUBRIC

(Note: Allot the marks in proportion of presentations and outcome observed. Marks excluding component of week 11 are to be filled by Institute mentor)

Week	Task to be assessed	Sk to be assessed Outcome Achievement - Poor Poor Marks		Outcome Achiever	ment - High	Week- wise
No	Task to be assessed			Good Marks	Excellent Marks	total Marks
1	Introduction of Industry	Minimal Knowledge of	Marks 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	Extensive Knowledge of	
2	Presentation of Layout of Industry, Specifications of Machines, raw materials, components available in the industry	Minimal w.r.t. tasks	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		Participation with	Good Participation with poor understanding (Marks –13-17)	Extensive Participation with poor understanding (Marks –18-20)	
4 to	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	Good Participation with Good	Extensive Participation with excellent 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)	nerformance	Extensive Participation with excellent performance (Marks – 21-25)	

12 Diary writing	 Results are not Presented properly, Project work is summarized and concluded not acceptable Future extensions are not specified (Marks -1-10) 	 Results are Presented just casually Project work is summarized and concluded casually Future extensions are casually specified (Marks -11-15) 	 Results are Presented well and properly, Project work is summarized and concluded to a Good level Future extensions are well specified (Marks -16-20) 	 Results are Presented exhaustively Project work is summarized and elaborated in excellent manner, concluded Future extensions are excellently specified (Marks -21- 25)
Total Out of :100				

Marks for (FA) are to be awarded for each week considering the level of completeness of activity observed as per table specified in Sr.No. XIII above, from the daily diary maintained . Feedback from industry supervisor shall also be considered.

XIV Summative Assessment (SA) of training:

Academic year: 20 -20

i) Suggested RUBRIC for SA

	Observation	ons from Orals		•	Present	tations			Total (100)
Enrollment Number	Tasks undertaken (20)	Overall Understanding (20)	Creativity /Innovation demonstrated (10)	Knowledge acquired (10)		Body Language (10)	Presentations	Diary, Report writing and / Product	

Name of mentor: Signature of Mentor

XV FORMATS

Format-1: Collecting	Information about	Industry/Organization	available for 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:
- 6) 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:

		Progr	amme name/ Title		44
Students		Total			
	Civil	Mechanical	Chemical		
Male					OH
Female					811
Total	\				

Total	1				+
7) Whether accommo If yes capacity:	dation avail	able for interns	Yes / No.		/
8) Whether internship If charged please spec					
Signature of responsi	ble person a	t Industry:			

Format-2: Obtaining Consent Letter from parents/guardians	
(Undertaking from Pa	arents)
To,	
The Principal,	
Subject: Consent for Industrial Training. Sir/Madam,	
I am fully aware that -	
i) My ward studying in semester at you	or institute has
to undergo 12 weeks of Industrial training for partial fulfillment Engineering.	towards completion of Diploma in
ii) For this fulfillment he/she has been deputed at	industry, located at
for Industrial training /internship	for the period from to
a) My ward will undergo the training at his/her own cost and risk d b) My ward will be entirely under the discipline of the organization the rules and regulations in face of the said organization. c) My ward is NOT entitled to any leave during the training period. d) My ward will regularly submit a prescribed weekly diary, duly fof the organization to the mentor faculty of the polytechnic. I have explained the contents of the letter to my ward, who has also I assure that my ward will be properly instructed to take his own call case of any accident neither industry nor the institute will be held.	where he/she will be placed and will abide by illed and countersigned by the training supervisor o promised to adhere strictly to the requirements. are to avoid any accidents/injuries in the industry.
	Signature:
	Name :
	Address :
	Phone Number:

T	G	**		-		.
Format-3:	Students	Enroll	ment for	In	dustrial	Training

(A	andan	nic Year –)
	CAUCH	IIII. ICAI —	

Sr No	Enrollment Number	Name of Student	Name of Industry	Name of Mentor at Institute
		•		
			In A	
			10	
	/			
7	/////			
1	/5/ 1/			
1	P /			I find I
				774

e Letter to the Indust	ry/Organization for the training	ng along with details of students and
lanager,		
Subject: Place	ement for Industrial training of	weeks in your organization
Reference: Y	our consent letter no:	
reference to the above	we are honored to place the follo	owing students from this institute for
ng in your esteemed or	ganization as per the arrangement	nt arrived at.
by enhance his/her employers in facilitating this expectations of this traine institute has secured axit training. In view of	oyability and livelihood opportude industrial Training for the stude ing, including the maintenance the necessary consent and under all the above industry shall refra	unities. In view of the above, we kindly ent. He/she has been adequately oriented and of a daily diary during the training period. taking from the parent/guardian regarding the nin from involving students into the mundane
Enrollment No	Name of Student	Name and designation of Mentor
nmme in	Engg.	
Enrollment No	Name of Student	Name and Designation of Mentor
all possible cooperation	to the students for above.	
	(Principal) Name of the Institute: with Seal	Cc- To HoD/Mentor
	Subject: Place Reference: Y reference to the above on this training is to equipore, as well as to provide enhance his/her employer in facilitating this expectations of this training is to enstitute has secured exit training. In view of the institute institute in the institute	Subject: Placement for Industrial training of Reference: Your consent letter no: reference to the above we are honored to place the follong in your esteemed organization as per the arrangement this training is to equip the student with some essential ork, as well as to provide exposure to the professional expenditure of the professional expension of this fraining, including the maintenance of the institute has secured the necessary consent and under xit training. In view of all the above industry shall refrang activities. Your cooperation in this regard will be higher than the professional expension of the student of the students for above. Subject: Placement for Industrial training of the following in your esteemed or student of the student of the student of the students for above.

Format-5: Undertaking by the students

Format-3. Under taking by the students	
ТО	
Principal	
Subject: Undertaking regarding Placement for Industrial training of 12/16/18 weeks duration	
I	at nsibilities
I assure you that I will be of good behavior and be obedient to the staff and mentor during the/Industrial training. I will also abide and will not participate in all activity. I will also myself within the rules and regulations of the Institution. I am also aware that I am participating in the	e way in any
Place :Signature of the student	
Date :Reg. No.	

Format-6:	Internships Da	ily Diary			
Name of the Student:			Name of the mentor (Faculty):		
Enrolli	ment Number: _		_ Semester: Acaden	nic Year	
Week	Day & Date	Discussion Topics/Activity	Details of Work Allotted Till Next Session /Corrections Suggested/Faculty Remarks	Signature of Industry Mentor	
	Mon, Date				
	Tue, Date		1 1 2 1 2 2 2		
Week 01	Wed, Date		7 7 7 7		
Week 01	Thu, Date				
	Fri, Date				
	Sat, Date				
. //	Mon, Date				
	Tue, Date				
	Wed, Date			Fa.7 /	
	Thu, Date	1 2 2			
1 1	Fri, Date				
1 . 4	Sat, Date				
	Mon, Date			1 44 1	
	Tue, Date			1 1101	
Week n	Wed, Date				
WCCK II	Thu, Date			_ /a	
	Fri, Date				
	Sat, Date				

MSBTE Approval Dt. 24/02/2025

Semester - 5, K Scheme