PRACTICUM

Class: B.Tech. I -Semester	Branch: Common to all branches		
Course Code:	**U24ELX08**	**Credits:**	**1**
Hours/Week (L-T-P-O-E):	**0-0-0-4-4**	**CIE Marks (%):**	**100**
Total Number of Teaching Hours:	**-**	**ESE Marks (%):**	**-**

Course Learning Objectives (LOs):

This course will develop students' knowledge in /on…

LO1: literature review and identifying research gaps

LO2: implementing a project independently by applying knowledge to practice

LO3: preparing well-documented report and informative PPT

LO4: effective technical presentation and creating video pitch

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Practicum is an independent project carried out by the student during the course period, under the supervision of allotted course faculty. It helps to reinforce the students' theoretical knowledge and develop their ability to apply this knowledge to the solution of practical problems. Practicums also prepare them for their MINI and MAJOR PROJECTs and for independent work in their chosen field that promotes creative abilities. Besides they provide Higher Order Cognitive Abilities (HOCAs).

(i).   Practicum is a mandatory semester project work.

(ii).   Practicum is offered as a one credit course. Student has to earn 4 credits (one in each semester from I to IV semesters)

(iii).   Allotment of Practicum topics for students:

       o   **Practicum matrix:** In week (-1), the class teacher, in consultation with HoD, shall prepare the practicum matrix of the section. The practicum matrix is the allotment of group of students to the different course faculty of the section, as shown below.

Course	U24MH101	U24PS102	U24EC103	U24CS104	U24EE105	U24CH106
Students allotted to different courses	B24XX001	B24XX011	B24XX021	B24XX031	B24XX041	B24XX051
	B24XX002	B24XX012	B24XX022	B24XX032	B24XX042	B24XX052
	B24XX003	B24XX013	B24XX023	B24XX033	B24XX043	B24XX053
	B24XX004	B24XX014	B24XX024	B24XX034	B24XX044	B24XX054
	B24XX005	B24XX015	B24XX025	B24XX035	B24XX045	B24XX055
	B24XX006	B24XX016	B24XX026	B24XX036	B24XX046	B24XX056
	B24XX007	B24XX017	B24XX027	B24XX037	B24XX047	B24XX057
	B24XX008	B24XX018	B24XX028	B24XX038	B24XX048	B24XX058

	B24XX009	B24XX019	B24XX029	B24XX039	B24XX049	B24XX059
	B24XX010	B24XX020	B24XX030	B24XX040	B24XX050	B24XX060

- o In week (-1), the class teacher of a section shall collect 10-12 topics for practicum from each of the course teachers of that section.
- o The class teacher, in consultation with HoD shall allot the practicum topics to the students of that section in the following format.

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CIRCULAR

Allotment of Practicum topics to students

Section : ……….

S.No.	Roll number of the student	Practicum topic allotted	Practicum under the course	Course faculty

Note:

1. The students should meet immediately the allotted course faculty for practicum and start working on the practicum with the guidance of course faculty.

2. To complete the Practicum, the student shall work in laboratories under supervision of allotted course faculty, in the allotted hours in the classwork timetable and also outside the class work hours during weekdays.

3. The course faculty are advised to guide the allotted students for practicum during the semester course work.

(Signature of class teacher)

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(iv). *To complete the practicum, the student shall work in laboratories under supervision of allotted course faculty, in the allotted hours in the classwork timetable and outside the class work hours during weekdays.*

(v). There shall be only continuous Internal Evaluation (CIE) for practicum for a maximum of 100 marks.

(vi). The practicum course faculty shall evaluate & submit the final marks of the allotted students in week (N+1) to the respective class teacher.

(vii). The class teacher shall collect the final marks of practicum of the students allotted to each course teacher and submit them to the CoE.

(viii). Course faculty shall follow his/her own rubrics for practicum evaluation. Focus shall be on knowledge, skills & qualities acquired by the student during the practicum course

(ix). A sample rubrics for assessment and evaluation of practicum is as follows:

Literature survey & Identification of research gaps	10 marks
Working model / process / software package / system developed	30 marks
Report writing (subjected to max of 30% plagiarism)	20 marks
Oral presentation with PPT and viva-voce	20 marks
Video pitch	20 marks
Total	100 marks

Note: It is mandatory for the student to appear for oral presentation and viva-voce to qualify for course evaluation of Practicum.

(a) **Practicum Topic**: Each student shall be allotted a topic for practicum by the course faculty member attached to him/her. Interested students can work on their own title for practicum, but with due approval from course faculty.

(b) **Working Model**: Each student is required to develop a prototype / process / system/simulation model on the given practicum topic and demonstrate/present, during the allotted time, before the course teacher.

(c) **Report:** Each student is required to submit a well-documented report on the allotted practicum topic as per the format specified by the course faculty. The student shall include answers to the following questions in the report and ppt presentation.

   o What was the objective of the practicum assigned?
   o What are the main responsibilities and tasks for practicum?
   o What knowledge and skills from the coursework are applied in the practicum?
   o What new knowledge and skills are acquired during the practicum?
   o In what ways, can the practicum be helpful for the professional career?
   o What gaps are identified in your practicum work?
   o What improvements or changes you suggest for addressing the identified gaps for future work?

(d) **Anti-Plagiarism Check:** The practicum report should clear plagiarism check as per the Anti-Plagiarism policy of the institute

(e) **Presentation:** Each student should prepare PPT with informative slides and make an effective oral presentation before the course teacher as per the schedule notified by the department

(f) **Video Pitch:** Each student should create a pitch video, which is a video presentation on his / her Practicum. Video pitch should be no longer than 5 minutes by keeping the pitch concise and to the point, which shall also include evidence like videos & pics at the time of implementing the practicum and also key points about his / her business idea / plan (*if any*) and social impact

(g) The student has to register for the Practicum as supplementary examination in the following cases:

     i)   he/she is absent for oral presentation and viva-voce

     ii)   he/she fails to submit the report in prescribed format

     iii)   he/she fails to fulfill the requirements of Practicum evaluation as per specified guidelines

Course Learning Outcomes (COs):
After completion of this course, the students should be able to…

CO1: synthesize literature survey, identify research gaps and define objective & scope of practicum problem

CO2: apply knowledge to design & conduct experiments, utilize modern tools for solution of practicum problem and develop working model/ process/ system

CO3: demonstrate the generic competencies in making a well-documented report portraying knowledge, skills, qualities acquired through practicum

CO4: create a video pitch on practicum and make an effective oral presentation using PPTs

Course Articulation Matrix (CAM):		U24ELX08 PRACTICUM													
CO		PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PSO 1	PSO 2
CO1	U24ELX08.1	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CO2	U24ELX08.2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
CO3	U24ELX08.3	2	2	2	2	2	2	2	2	2	2	2	2	2	2

CO4	U24ELX08.4	2	2	2	2	2	2	2	2	2	2	2	2	2	2
U24ELX08		2	2	2	2	2	2	2	2	2	2	2	2	2	2
3 – HIGH, 2 – MEDIUM, 1 - LOW															