BIRLA INSTITUTE OF TECHNOLOGY & SCIENCE, PILANI PRACTICE SCHOOL DIVISION

Practice School –I, Summer 2023

COURSE NO. BITS F221 / BITS F231/ BITS F241 PRACTICE SCHOOL-I HANDOUT

Duration	:	30th May to 21st July, 2023
Practice School Station		
Name	:	
Address		
Website Address	:	
Station Coordinator		
Name	:	
Designation	:	
Mobile Number	:	
E-mail	:	
PS-I Faculty		
Name	:	
Mobile Number	:	
E-mail	:	
Project Domain:		
Mentor Name	:	
Designation	:	
Mobile number	:	
Email	:	

Brief description about the Practice School Station:

I. Overview of PS-I Course:

Course Objectives

The PS-I course provides students with a unique opportunity to gain valuable experience beyond classrooms by academically engaging in projects identified from industries of varying scale, scope, and complexity. Following are the broad objectives of this course:

- Provide an opportunity to understand and learn the operations of an industry
- Gain proficiency to solve industry problems applying theoretical concepts and contemporary tools.
- Provide an opportunity to enhance technical, interpersonal and communication skills through practice.
- Contribute, create and drive activities involving innovation and communication across multiple demographics, while adhering to highest ethics and integrity.

Learning Outcomes

After successful completion of this course, students will be able to but not limited to:

- Understand the technological processes and identify various problems at the industry/ organization.
- Work on possible solution(s) to an identified problem/ project, with professional standards.
- Seek, visualize, analyse and record data/information through appropriate documentation.
- Improve problem solving and critical thinking skills.
- Develop appropriate organizational attitudes and values.
- Acquire soft skills and social skills, particularly to communicate with industry professionals.

II. Orientation and Initial Preparation

Orientation to students will happen between day 1 and 3, on the following three levels:

- General (about PS-I, PPT will be prepared by PSD and shared with all faculty & students)
- Industry (Electrical/ Mechanical/ IT etc.): PS-I faculty should prepare this in coordination with industry mentors
- Domain (Power Electronics/ VLSI/ Embedded Systems, etc.): PS-I faculty should prepare this in coordination with industry mentors

(Prior prep content will be concentrated in the first few days. This will be domain based (for e.g. IoT/Embedded Systems) This will give exposure about the domain to the student. Preferably not more than 2 hours/day of content – either as live or recorded lectures.)

In order to direct students to perform the project work, the following preparations will be done during the first week:

- Virtual tour/ expert lectures about the PS station/ industry/ domain

 (Virtual Tour will be given by the organization where the details of various units within the organization and how they are interconnected will be described. Where this may not be possible industry experts will talk about the sector for instance someone from CEERI can talk about the type of work and opportunities in the research sector this is an extension of the orientation. This is to replace the physical tour of the industry)
- Gap Lectures/ Webinars by industry experts/ BITS faculty
- Various reference materials will be provided to students during this phase

III. Project Execution and Monitoring:

Industry domain:

(Example: Electrical/ Mechanical/ IT etc.)

Project domain:

(Example: Power Electronics/ VLSI/ Embedded Systems, etc.)

Project Details:

A detailed report about the project has to be filled by the students, after discussion with PS-I Faculty & Industry Mentor within a week from start of PS-I.

(At the end of the first week, after interacting with the Industry Mentor & Faculty – student is expected to come up with project details – this is elaborated in the form)

(Please refer to Annexure-II for further details)

Project Monitoring Plan:

- Project details: (Title, Mentor, skill set required, expected outcomes, work plan, major milestones) will be prepared and submitted by students to PS-I faculty, within a week from the start of PS-I
- Dairy: Weekly update on work completed and plan for the work to be executed during the forthcoming week. This will be done in Moodle LMS.
- Student-PS-I Faculty interaction: Daily (First 2 weeks and final 2 weeks); Alternate days (rest of the PS-I period) and as required by the project work.
- Student-Industry Mentor interaction: Daily (First 2 weeks and final 2 weeks); Weekly for rest of the PS-I period, accessible via chat and discussion forum, and as required by the project work. (Project specific lectures have been made optional. PS-I Faculty after going through the skill set requirement will then decide whether any additional course material is required or not. PS-I project learning is supposed to be depth based rather than a broad spectrum of topics. For e.g. if a student is working on anti-lock braking system he need not know everything about automobiles he needs to probably understand about chassis domain in automobile with detailed understanding of ABS. PS-I Faculty after getting details of the project will then decide whether any further sessions are required. Also software learning will be decided after discussion with industry mentor)

Evaluation Schedule:

Evaluation Component	Weightage (%)	Date	Evaluation Component	Weightage (%)	Date
Quiz-I	05	6-8 June	Quiz-II	05	30 June-3 July
Group Discussion-I	05	13-15 June	Group Discussion-II	05	5-8 July
Seminar-I	10	20-24 June	Seminar-II	15	18-20 July
Project Report-I	10	20-24 June	Project Report-II	20	18-20 July
Observation-I	05	20-24 June	Observation-II	10	18-20 July
Diary-I	05	20-24 June	Diary-II	05	18-20 July
Mid-Sem Evaluation	40	25, June	Final Evaluation	100	21, July

Make-Up:

Make-up for components may be given only in the genuine cases that involve medical or network connectivity issues with prior permission from the BITS faculty.

Mid-semester grading and Final grading:

The total marks of all the students (Pilani + Goa + Hyderabad) will be tabulated in a descending order (equivalent to a histogram). The performance of students at a given station will be analyzed in terms of the highest marks, the lowest marks and the dividing lines between various clusters. The gaps between clusters and the nature of cluster will guide the drawing of dividing lines between various grades.

Note: (Faculty should mention specific rules and regulation pertaining to the station (if any), to ensure discipline at the station).

Date:		
		(Signature of PS-I Faculty)

PS-I CALENDAR

Summer 2023

Day	Activity
1 st	 PS-I Programme starts Orientation program to students by PS-I faculty/ Industry mentor
1 st to 7 th	 Sharing PS-I Course Handout to the students Online submission of information by PS-I faculty (such as Initial information, Joining report, etc.) Conduct of preparatory course/ sharing e-contents, etc.
8 th - 10 th	Conduct Quiz 1, display of marks and feedback to students on Quiz 1
15 th - 17 th	 Conduct Group Discussion 1, display of marks and feedback to students on Group Discussion 1
22 nd - 24 th	Submission of soft copy of Project Report 1 by students
24 th - 25 th	 Conduct Seminar 1 Evaluation of Project Report 1 Display of marks of Project Report 1, Observation 1 and Diary 1 Feedback to students on Seminar I and Project Report I
26 th	 Announcement of mid-term grades followed by guidance and counselling to students to improve their performance (if required) Pursuing consent for next summer PS-I with organization
27 th	Online submission of mid-term grading in PSMS
32 nd – 34 th	Conduct Quiz II, display of marks and feedback on Quiz II
$37^{th} - 41^{st}$	Conduct Group Discussion II, display of marks and feedback on GD II
42 nd	 Email 'Consent Proforma' for PS-I, 2024 to psd@hyderabad.bits-pilani.ac.in Inform students about activation of online feedback link and filling it
$50^{\text{th}} - 52^{\text{nd}}$	Submission of Project Report II by students
50 th – 52 nd	 Conduct Seminar II Evaluation of Project Report II Evaluation of Observation II and Diary II Display of total marks obtained by students Final grading (NOT TO BE INFORMED TO STUDENTS) Online feedback ends
53 rd	 Online submission of final grades Online submission of faculty feedback questionnaire Online submission of facilities at PS-I station in PSMS PS-I Programme ends