DATE	28-02-2026
TEAM ID	LTVIP2026TMIDS89110
PROJECT NAME	plugging into the future: an exploration of electricity consumption patterns using tableau
MAXIMUM MARKS	4 MARKS

5.2 - Sprint Delivery Plan

Phase 1: Live Sessions (Week 1–6)

Objective: Build strong foundational knowledge and prepare interns for real-time project development.

Sprint 1 (Week 1–2): Fundamentals & Tools

Focus Areas:

- Introduction to Internship Program
- Programming Fundamentals (Python / Relevant Tech Stack)
- Git & GitHub
- Development Environment Setup
- Basics of Databases

Deliverables:

- Setup development environment
- GitHub repository creation
- Mini practice assignments

Sprint 2 (Week 3–4): Data & Backend Foundations

Focus Areas:

- Data Handling (Pandas / Data Structures)
- Data Cleaning Techniques

- Introduction to APIs
- Backend Basics (Flask / FastAPI)
- SQL & Database Integration

Deliverables:

- Data preprocessing assignment
- Basic API development task
- Database connectivity demo

Sprint 3 (Week 5–6): Machine Learning & Deployment Basics

Focus Areas:

- Machine Learning Fundamentals
- Model Training & Evaluation
- REST API Integration with Model
- Introduction to Web Integration
- Deployment Overview

Deliverables:

- Simple ML Model
- Model evaluation report
- API with working prediction endpoint

◇ Phase 2: Project Work (Week 7–15)

Objective: Apply learned skills to build a complete end-to-end project.

Sprint 4 (Week 7–8): Project Planning & Data Collection

Activities:

- Finalize project topic

- Define problem statement
- Collect dataset
- Perform initial data analysis (EDA)

Deliverables:

- Project proposal document
- Dataset documentation
- EDA report

Sprint 5 (Week 9–10): Data Preprocessing & Feature Engineering

Activities:

- Clean dataset
- Handle missing values & outliers
- Feature engineering
- Data transformation
- Train-test split

Deliverables:

- Cleaned dataset
- Preprocessing pipeline
- Feature documentation

Sprint 6 (Week 11–12): Model Development & Optimization

Activities:

- Train multiple models
- Hyperparameter tuning
- Model comparison

- Performance evaluation

Deliverables:

- Best performing model
- Evaluation metrics report
- Saved model artifact

Sprint 7 (Week 13–14): API Development & Integration

Activities:

- Develop REST API
- Integrate trained model
- Implement validation & error handling
- Test API endpoints

Deliverables:

- Functional API
- API documentation
- Backend deployment

Sprint 8 (Week 15): Web Integration & Final Deployment

Activities:

- Develop frontend interface
- Connect frontend with API
- End-to-end testing
- Deployment & final presentation

Deliverables:

- Fully functional web application

- Deployment link
- Final project presentation
- Internship completion report

Final Outcome

By the end of 15 weeks, interns will have:

- Strong technical foundation
- Real-time project experience
- A complete end-to-end deployed project
- Industry-ready portfolio project