

LAB SCHEDULE PLAN



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited NAAC with "A" Grade – 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act. Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada Seetharampuram, W.G.DT., Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF INFORMATION TECHNOLOGY TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
23IT5Z01	TINKERING LAB(UI DESIGN-FLUTTER)	3	CSE DS-B	3 Periods	2025-2026	09-07-25

COURSE OUTCOMES

1	Learn to implement flutter widgets and layouts
2	Understands responsive UI design and with navigation in flutter
3	Knowledge on widges and customize widgets for specific UI elements,Themes
4	Understand to include animation apart from fetching data

Experiment Number	Experiment	Contact Hours
1	a) Install Flutter and Dart SDK. b) Write a simple dart program to understand the language basics.	3
2	a) Explore various flutter widgets(text,image,container,etc.) b) Implement different layout structures using row,column,and stack widgets.	3
3	a) Design a responsive UI that adapts to different screen sizes. b) Implement media queries and breakpoints for responsiveness.	3
4	a) Set up navigation between different screens using navigator. b) Implement navigation with named routes.	3
5	a) Learn about stateful and stateless widgets. b) Implement state management using set state and provider.	3
6	a) Create custom widgets for specific UI elements. b) Apply styling using themes and custom styles.	3
7	a) Design a form with various input fields. b) Implement form validation and error handling.	3
8	a) Add animations to UI elements using flutter's animation framework.	3



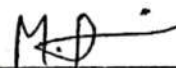
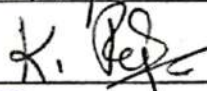
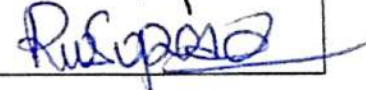
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	b) Experiment with different types of animations(fade,slide,etc.).	
9	a) Fetch data from a REST API. b) Display the fetched data in meaningful way in the UI.	3
10	a) Write unit tests for UI components. b) Use flutter's debugging tool to identify and fix issues.	3
CUMULATIVE PROPOSED PERIODS		36

	Name	Signature with Date
i. Faculty	Mrs.M.Pavani	
ii. Module Coordinator	K.Raja	
iii. Programme Coordinator	Dr.RVVS Prasad	


Principal