ESD - SELF BALANCING ROBOT

PROJECT TITLE	Self Balancing Robot	COMPANY NAME	Amrita RAU
PROJECT MANAGER	Sreejith S	DATE	11/4/2019

WBS NUMBER	TASK TITLE	TASK OWNER	START DATE	DUE DATE	DURATION	PCT OF TASK COMPLETE
1	**Project Conception and Initiation**					
1.1	Project Specification	K				100%
1.2	Block Diagram	K				100%
1.2.1	Dataflow Graphs	K				30%
1.3	Research Component working principles	K & SJ				95%
1.3.1	TB6612FNG + Motor	K & SJ				100%
1.3.2	IMU + I2C	K & SJ				80%
1.3.3	PWM + Power mgmnt	K & SJ				100%
1.3.4	Motor Encoder - QEI	K & SJ				100%
2	**Engineering Design**					
2.1	Mathematical Model	SJ				100%
2.2	CAD model - Body design & CM estimation	SJ				100%
2.3	Simulink Model & simulation- PID tuning	SJ				100%
2.4	Callgraph	K				100%
2.5	Flow Chart	SJ				100%
2.6	Circuit Schematics	K & SJ				100%
2.7	Procurement	SJ				100%
3	**Development**					
3.1	Fabrication	K & SJ				95%
3.1.1	Cut body plates	SJ				100%
3.1.2	Perfboard Soldering	K & SJ				90%
3.2	Code	K & SJ				94%
3.2.1	GPIO - gpio.h, time.h	K & SJ				100%
3.2.2	Motor Control - motor.h with pwm	K & SJ				100%
3.2.3	Misc - encoder.h + uart.h	K & SJ				100%
3.2.4	PID Controller - pid.h	K & SJ				100%
3.2.5	IMU - MPU6050.h, i2c.h	K & SJ				70%
3.3	Unit Testing	K & SJ				90%
3.4	Final Assembly	K & SJ				100%

PHASE	WEEK	DAYS	DATES
PHASE ONE	WEEK 1	S M T W T F S	3 4 5 6 7 8 9
PHASE ONE	WEEK 2	S M T W T F S	10 11 12 13 14 15 16
PHASE ONE	WEEK 3	S F S S M T W	17 29 30 1 2 3 4
PHASE TWO	WEEK 4	T F S S M R F	5 6 7 8 9
PHASE TWO	WEEK 5	M T W R F	
PHASE TWO	WEEK 6	M T W R F	
PHASE THREE	WEEK 7	M T W R F	
PHASE THREE	WEEK 8	M T W R F	
PHASE THREE	WEEK 9	M T W R F	
PHASE FOUR	WEEK 10	M T W R F	
PHASE FOUR	WEEK 11	M T W R F	
PHASE FOUR	WEEK 12	M T W R F	

Deadline