

CougSat-1											
V1.2.1						End: 27-May-20					
Subsystem	Component	Type	Start	Design		Implement Part 1		Implement Part 2		Test	
Self-contained system within the satellite	Subassembly of the subsystem	Primary discipline	Component commencing	Outlining, prototyping, planning, diagraming, etc.		Schematic, mCAD, front end, interfacing, etc.		Board layout, machining, backend, assembly, etc.		Functional, performance, validation, etc.	
CougSat-1	Engineering Model Flight Unit	Assembly	2-May-18	3 weeks	23-May-18	82 weeks	18-Dec-19	1 weeks	25-Dec-19	5 weeks	29-Jan-20
		Assembly	25-Dec-19	4 weeks	22-Jan-20	4 weeks	19-Feb-20	8 weeks	15-Apr-20	12 weeks	27-May-20
EPS	Mainboard V2.1	Hardware	23-May-18	2 weeks	6-Jun-18	8 weeks	1-Aug-18	18 weeks	5-Dec-18	17 weeks	3-Apr-19
	Mainboard V2.2	Hardware	5-Dec-18	17 weeks	3-Apr-19	2 weeks	17-Apr-19	6 weeks	29-May-19	4 weeks	26-Jun-19
	Solar Panel	Hardware	1-Aug-18	2 weeks	15-Aug-18	8 weeks	10-Oct-18	26 weeks	10-Apr-19	8 weeks	5-Jun-19
	Backplane V2.0	Hardware	29-Aug-18	2 weeks	12-Sep-18	3 weeks	3-Oct-18	10 weeks	12-Dec-18	11 weeks	27-Feb-19
	Backplane V3.0	Hardware	12-Dec-18	11 weeks	27-Feb-19	2 weeks	13-Mar-19	6 weeks	24-Apr-19	2 weeks	8-May-19
	PMIC	Software	24-Oct-18	3 weeks	14-Nov-18	20 weeks	3-Apr-19	8 weeks	29-May-19	8 weeks	24-Jul-19
Avionics	Mainboard V1.1	Hardware	31-Oct-18	3 weeks	21-Nov-18	19 weeks	3-Apr-19	16 weeks	24-Jul-19	8 weeks	18-Sep-19
	ADCS Controller	Software	26-Sep-18	10 weeks	5-Dec-18	17 weeks	3-Apr-19	14 weeks	10-Jul-19	8 weeks	4-Sep-19
	IFJR Controller	Software	3-Apr-19	8 weeks	29-May-19	8 weeks	24-Jul-19	12 weeks	16-Oct-19	8 weeks	11-Dec-19
	IHU	Software	26-Sep-18	14 weeks	2-Jan-19	20 weeks	22-May-19	8 weeks	17-Jul-19	8 weeks	11-Sep-19
Communications	Comms PCB V1.0	Hardware	29-Aug-18	11 weeks	14-Nov-18	8 weeks	9-Jan-19	12 weeks	3-Apr-19	8 weeks	29-May-19
	Comms PCB V1.1	Hardware	3-Apr-19	8 weeks	29-May-19	2 weeks	12-Jun-19	6 weeks	24-Jul-19	4 weeks	21-Aug-19
	Comms Controller	Software	6-Feb-19	8 weeks	3-Apr-19	4 weeks	1-May-19	12 weeks	24-Jul-19	8 weeks	18-Sep-19
	+X Panel V1.0	Hardware	26-Sep-18	3 weeks	17-Oct-18	24 weeks	3-Apr-19	6 weeks	15-May-19	6 weeks	26-Jun-19
	-Z Panel V1.0	Hardware	31-Oct-18	1 weeks	7-Nov-18	21 weeks	3-Apr-19	6 weeks	15-May-19	6 weeks	26-Jun-19
	Ground Station V1.0	Hardware	29-Aug-18	8 weeks	24-Oct-18	4 weeks	21-Nov-18	22 weeks	24-Apr-19	2 weeks	8-May-19
	Ground Computer	Software	23-May-18	3 weeks	13-Jun-18	44 weeks	17-Apr-19	20 weeks	4-Sep-19	8 weeks	30-Oct-19
Payload	Camera PCB V1.1	Hardware	24-Oct-18	26 weeks	24-Apr-19	4 weeks	22-May-19	8 weeks	17-Jul-19	4 weeks	14-Aug-19
	Germination PCB V1.0	Hardware	24-Oct-18	44 weeks	28-Aug-19	4 weeks	25-Sep-19	8 weeks	20-Nov-19	4 weeks	18-Dec-19
Mechanical	Structure	Hardware	23-May-18	3 weeks	13-Jun-18	36 weeks	20-Feb-19	12 weeks	15-May-19	8 weeks	10-Jul-19
	Germination	Hardware	23-May-18	7 weeks	11-Jul-18	40 weeks	17-Apr-19	12 weeks	10-Jul-19	8 weeks	4-Sep-19

Milestones		
Name	Description	Date
EM Integration	Assembly of all subsystems and components. Requires: all hardware done	18-Dec-19
EM Day in the Life Test	A duration test of the satellite in simulated space environment. Requires: all software done	25-Dec-19
FU Integration	Assembly of all flight ready subsystems and components	19-Feb-20
FU Day in the Life Test	A duration test of the flight unit in simulated space environment	15-Apr-20
FRR	Review of the flight unit to determine its readiness to fly	29-Apr-20
MRR	Review of the mission to determine its readiness to execute	13-May-20
ILC	Initial launch capabilities	27-May-20

