Name	Work	2022, Qtr 2
		mar / abr / mai / jun
PSim Simulations	**16d**	
RFOC	3d	
SFOC	3d	
Variable Id Reference	4d	
PI Tunning	3d	
Anti-Slip Functions	3d	
IM Economic Studies	**4d**	
Parameter Discovery	2d	
Workbench Limitations (nominal values)	1d	
Motor Model Studies	1d	
Motor Model and Parameter Estimation(MATLAB)	**22d**	
General Motor Model	7d	
Offline Plug-In Parameter Estimation	5d	
Online Parameter Estimation	10d	
XMC Code Export and Creation	**40d**	
FOC Code build	20d	
Offline Parameter Estimation Code Export	7d	
Online Parameter Estimation Code Export	7d	
Anti-Slip limitations Code build	3d	
Communication Protocol Build	3d	
Testing and Verification	**29d**	
FOC Code Testing (No Load)	4d	
FOC Testing (Dynamic Nominal Load)	9d	
Offline Parameter Estimation Testing (Individual)	4d	
Integrated Offline P.E. and FOC Test	4d	
Anti-Slip Limiter Testing	4d	
Communication Testing (Off Test Bench)	2d	
Online Parameter Estimation Testing (integrated)	2d	
Dissertation Writing	**87d**	
SOTA Review	5d	
Test Bed Exploration	**7d**	
Economic Tests - Parameter Discovery	3d	
Test Bed Sensoring	4d	
PSim Simulations	**17d**	
RFOC v SFOC	7d	
Anti-Slip	4d	
Id Reference	3d	
PI Tunning	3d	
MATLAB Parameter Estimation	**42d 5h**	
Motor Model	**3d**	
Motor Model Creation / Explination	3d	
Offline Parameter Estimation	**20d 5h**	
Stator Resistance Measurments	7d	
Stator Inductance Measurments	6d 5h	
Rotor and Magnetic Quantities Aproximation	7d	
Online Parameter Estimation	**19d**	
Relevant Parameter to Estimate	4d	
Kalaman Filters	9d	
Function and Parameter Aproximation	6d	
XMC Code Build	**6d 3h**	
Hardware Choice and Parameters	2d	
GPIO and ADC Configuration	2h	
FOC Code Explination	2d	
Parameter Estimation Code Export	2d	
Communication protocol code	1h	
Testing and Results	**7d**	
Individual Testing (Bottom-Up)	3d	
Integrated No-Load Testing	1d	
Integrated Full Load Testing	1d	
Efficiency Calculations	2d	
Discussion and Interpretation	2d	

WBS	Name	Start	Finish	Work	Duration	Slack	Cost	Assigned to	% Complete
1	**PSim Simulations**	**fev 21**	**mar 1**	**16d**	**6d**	**63d 2h**	**0**		0
1.1	RFOC	fev 21	fev 23	3d	3d	66d 3h	0		0
1.2	SFOC	fev 23	fev 25	3d	3d	64d 3h	0		0
1.3	Variable Id Reference	fev 22	fev 25	4d	4d	64d 3h	0		0
1.4	PI Tunning	fev 22	fev 24	3d	3d	65d 3h	0		0
1.5	Anti-Slip Functions	fev 24	mar 1	3d	3d	63d 2h	0		0
2	**IM Economic Studies**	**mar 2**	**mar 3**	**4d**	**2d**	**51d 3h**	**0**		0
2.1	Parameter Discovery	mar 2	mar 3	2d	2d	51d 3h	0		0
2.2	Workbench Limitations (nominal values)	mar 3	mar 3	1d	1d	51d 3h	0		0
2.3	Motor Model Studies	mar 3	mar 3	1d	1d	51d 3h	0		0
3	**Motor Model and Parameter Estimation(MATLAB)**	**mar 7**	**mar 25**	**22d**	**15d**	**44d 3h**	**0**		0
3.1	General Motor Model	mar 7	mar 15	7d	7d	52d 3h	0		0
3.2	Offline Plug-In Parameter Estimation	mar 11	mar 17	5d	5d	29d 4h	0		0
3.3	Online Parameter Estimation	mar 14	mar 25	10d	10d		0		0
4	**XMC Code Export and Creation**	**mar 7**	**abr 5**	**40d**	**22d**	**37d 3h**	**0**		0
4.1	FOC Code build	mar 7	abr 1	20d	20d	5d	0		0
4.2	Offline Parameter Estimation Code Export	mar 18	mar 28	7d	7d	43d 3h	0		0
4.3	Online Parameter Estimation Code Export	mar 28	abr 5	7d	7d		0		0
4.4	Anti-Slip limitations Code build	mar 24	mar 28	3d	3d	43d 3h	0		0
4.5	Communication Protocol Build	mar 30	abr 1	3d	3d	39d 3h	0		0
5	**Testing and Verification**	**abr 18**	**mai 18**	**29d**	**23d**	**6d 3h**	**0**		0
5.1	FOC Code Testing (No Load)	abr 18	abr 21	4d	4d	6d	0		0
5.2	FOC Testing (Dynamic Nominal Load)	abr 22	mai 4	9d	9d	6d 3h	0		0
5.3	Offline Parameter Estimation Testing (Individual)	mai 5	mai 10	4d	4d	6d 3h	0		0
5.4	Integrated Offline P.E. and FOC Test	mai 11	mai 16	4d	4d	6d 3h	0		0
5.5	Anti-Slip Limiter Testing	abr 22	abr 27	4d	4d	21d 3h	0		0
5.6	Communication Testing (Off Test Bench)	abr 22	abr 25	2d	2d	23d 3h	0		0
5.7	Online Parameter Estimation Testing (integrated)	mai 17	mai 18	2d	2d	6d 3h	0		0
6	**Dissertation Writing**	**fev 22**	**mai 27**	**87d**	**68d 3h**		**0**		0
6.1	SOTA Review	fev 22	fev 28	5d	5d	63d 3h	0		0
6.2	**Test Bed Exploration**	**mar 4**	**mar 14**	**7d**	**7d**	**53d 3h**	**0**		0
6.2.1	Economic Tests - Parameter Discovery	mar 4	mar 8	3d	3d	53d	0		0
6.2.2	Test Bed Sensoring	mar 9	mar 14	4d	4d	53d 3h	0		0
6.3	**PSim Simulations**	**abr 27**	**mai 12**	**17d**	**12d**	**10d 3h**	**0**		0
6.3.1	RFOC v SFOC	abr 27	mai 5	7d	7d	15d 3h	0		0
6.3.2	Anti-Slip	mai 3	mai 6	4d	4d	14d 3h	0		0
6.3.3	Id Reference	mai 9	mai 11	3d	3d	11d 3h	0		0
6.3.4	PI Tunning	mai 10	mai 12	3d	3d	10d 3h	0		0
6.4	**MATLAB Parameter Estimation**	**mar 18**	**mai 5**	**42d 5h**	**35d**	**15d 3h**	**0**		0
6.4.1	**Motor Model**	**mar 28**	**mar 30**	**3d**	**3d**	**41d 3h**	**0**		0
6.4.1.1	Motor Model Creation / Explination	mar 28	mar 30	3d	3d	41d 3h	0		0
6.4.2	**Offline Parameter Estimation**	**mar 18**	**abr 15**	**20d 5h**	**20d 5h**	**29d 5h**	**0**		0
6.4.2.1	Stator Resistance Measurments	mar 18	mar 28	7d	7d	29d 4h	0		0
6.4.2.2	Stator Inductance Measurments	mar 29	abr 6	6d 5h	6d 5h	29d 5h	0		0
6.4.2.3	Rotor and Magnetic Quantities Aproximation	abr 6	abr 15	7d	7d	29d 5h	0		0
6.4.3	**Online Parameter Estimation**	**abr 6**	**mai 5**	**19d**	**22d**	**15d 3h**	**0**		0
6.4.3.1	Relevant Parameter to Estimate	abr 6	abr 11	4d	4d		0		0
6.4.3.2	Kalaman Filters	abr 15	abr 27	9d	9d		0		0
6.4.3.3	Function and Parameter Aproximation	abr 28	mai 5	6d	6d		0		0
6.5	**XMC Code Build**	**mai 6**	**mai 16**	**6d 3h**	**6d 3h**	**9d**	**0**		0
6.5.1	Hardware Choice and Parameters	mai 6	mai 9	2d	2d		0		0
6.5.2	GPIO and ADC Configuration	mai 10	mai 10	2h	2h		0		0
6.5.3	FOC Code Explination	mai 10	mai 12	2d	2d		0		0
6.5.4	Parameter Estimation Code Export	mai 12	mai 16	2d	2d		0		0
6.5.5	Communication protocol code	mai 16	mai 16	1h	1h		0		0
6.6	**Testing and Results**	**mai 16**	**mai 25**	**7d**	**7d**	**2d**	**0**		0
6.6.1	Individual Testing (Bottom-Up)	mai 16	mai 19	3d	3d		0		0
6.6.2	Integrated No-Load Testing	mai 19	mai 20	1d	1d		0		0
6.6.3	Integrated Full Load Testing	mai 20	mai 23	1d	1d		0		0
6.6.4	Efficiency Calculations	mai 23	mai 25	2d	2d		0		0
6.7	Discussion and Interpretation	mai 25	mai 27	2d	2d		0		0

Name	Short name	Type	Group	Email	Cost
Test Bench Access		Work			100
Writing Time		Work			20
PSim Access		Work			30
MATLAB Access		Work			30
XMC Access		Work			40
Inverter Access		Work			150

Name	Short name	Type	Group	Email	Cost
Test Bench Access					
Writing Time					
PSim Access					
MATLAB Access					
XMC Access					
Inverter Access					