Dyno Team Work Breakdown Schedule

ECE 492 - Spring 2015

Revision 2.3.0
Stephen Mazich

Week 4	Milestone	Dyno to computer sensor and data acquisition integration and motor controller water cooling system operating
	Steve	Revised task breakdown schedule and submit user manual
	Alex	Sensor System Placement and cable routing and management
	John	Dyno to computer sensor and data acquisition integration
	Brendan	Submit the user manual
	Nate	Build the motor controller cooling system and determine operating temps of motor controller

Week 5	Milestone	Computer controllable throttle input to motor controller and motor controller programmed
	Steve	Submit Calibration and Error Analysis and revise Task Breakdown Schedule
	Alex	Submit ATP Final
	John	Computer controllable throttle input to motor controller
	Brendan	Model the motor in software
	Nate	Program and control the motor controller via software

Week 6	Milestone	Integrate data acquisition systems and computer controlled throttle integrated with motor controller
	Steve	Submit memo on Dyno to VSCADA dynamometer interface design
	Alex	E-Stop and oil temp. sensor design
	John	Integrate computer controlled throttle with motor controller and demonstrate user interface for system
	Brendan	Simulate and document the motor model
	Nate	Integrate data acquisition systems

Week 7	Milestone	Present CDR, submit hardware purchase proposal, and demonstrate data acquisition
	Steve	Submit Approved ATP, and **completed fabrication ready drawings**

	Alex	Final system design with subsystem breakdown draft and detailed subsystem breakdown
	John	Draft final report and submit Project Budget
	Brendan	Maintenance manual draft and present motor model simulation
	Nate	**Data acquisition demonstration (T000-2)**

Week 8	**Milestone**	Review feedback and draft corrective memo from feedback
	Steve	Review CDR feedback and draft corrective memo
	Alex	Review safety plan feedback and draft corrective memo
	John	Review demonstration feedback and draft corrective memo
	Brendan	Review communication feedback and draft corrective memo
	Nate	Review system design feedback and draft corrective memo

Week 9	**Milestone**	**MCS put together and independently verify basic subsystem functionality**
	Steve	Prepare AEC 401 and test (T000-1)
	Alex	**Test safety systems (T003-1, -3)**
	John	**Verify throttle system (T000-2)**
	Brendan	Develop simulation for full vehicle
	Nate	**Verify motor controller sensors (T001-2, -3, -4)**

Week 10	**Milestone**	**Verify dyno sensors and torque and rpm charts generated**
	Steve	Draft D006: ATR
	Alex	Generate full power torque and rpm charts
	John	Implement dyno settings for realistic test conditions

	Brendan	Develop simulations for realistic scenarios
	Nate	Verify dynamometer sensors (T001-1, -5)

Week 11	**Milestone**	**ATR drafted and submitted QA Audit Report**
	Steve	**Test general requirements section from ATP (and draft ATR section)**
	Alex	**Test safety section from ATP (and draft ATR section)**
	John	**Test test stand section from ATP (and draft ATR section)**
	Brendan	Determine power consumption data and graph data for various realistic scenarios
	Nate	**Test sensors section from ATP (and draft ATR section)**

Week 12	**Milestone**	Integrate with completed systems, formally inspect hardware, and develop gear ratio
	Steve	Complete ATP inspections
	Alex	Integrate with TSI (T002-4)
	John	VSCADA integration (T002-1, -2)
	Brendan	Develop appropriate gear ratio for the car
	Nate	Interface throttle with VSCADA (T002-3)

Week 13	**Milestone**	Submit ATR
	Steve	Complete and submit ATR
	Alex	Draft final report
	John	Draft final report
	Brendan	Draft final maintenance manual
	Nate	Draft final maintenance manual

Week 14

Milestone Submit the Final Report and Maintenance Manual

Steve	Submit the final report
Alex	Submit the final report
John	Submit the final report
Brendan	Submit the Maintenance Manual
Nate	Submit the Maintenance Manual

Week 15

Milestone Demo our part of the system and available integration with other groups

Steve	Demo motor control system
Alex	Demo the motor control system
John	Demo motor control system
Brendan	Demo the motor control system
Nate	Demo motor control system