Task Name	SENG (hours)	ENG (hours)	TECH (hours)	INT (hours)	Task Total Hours
Task 1 Competition Preparation	0	0	28.5	1.25	29.75
Task 2: Analyze Treatment Options	0	21	78.5	28	107
Task 3: Bench Scale Model Design	0	18	12	20	50
Task 4: Fabrication of Bench Scale Model	0	6.75	45.25	7.25	59.25
Task 5 Full-Scale Design	0	12.5	1.25	3	16.75
Task 6: Techno-Economic Analysis	0	0	0	28.25	28.25
Task 7: Impacts Analysis	0	0	0	3	3
Task 8: Project Deliverables	113	138.3	162.5	253.5	667.3
Task 9: Project Management	14.5	14.75	6	13.75	49
Total Hours			1043.65		

Staffing Hours Summary					
Position	Hours				
Senior Engineer	127.75				
Engineer	214.3				
Lab Technician	334.1				
Engineering Intern	367.5				
Total Hours	1043.65				

	Cost of	Engineeri	ng Services			
Personnel	Classification	Hours	Rate (\$/hr)		Cost (\$)	
	Senior Engineer	127.75	\$	180	\$	22,995
	Engineer	214.3	\$	80	\$	17,144
	Lab Technician	334.1	\$	50	\$	16,705
	Engineering Intern	367.5	\$	25	\$	9,187.50
1.0 Personnel Cost					\$	66,031.50
2.0 Travel			Cost Per (\$)		Cost (\$)	
Transportation	1 Van 4-Day Trip		\$65/day		\$	260
Mileage	868 mi Roundtrip		\$0.38/mile		\$	330
Hotel	3 Rooms 3 Nights		\$100/night		\$	900
Per Diem	5 People 4 Days		\$19/day		\$	380
Travel Cost					\$	1,870
3.0 Lab Facilities						
	ENE Lab 10 Days		\$100/	/day	\$	1,000
Lab Cost					\$	1,000
4.0 Supplies						
	See Itemized Supplies List				\$	1,984
Supplies Cost					\$	1,984
5.0 Subcontract						
	Machine Shop, Acrylic Cuts		\$7	0	\$	70
Subcontract Cost					\$	70
Total Cost						70,955.50