

# ROBOTICS HIDE AND SEEK / GPS PROJECT

**Deliverables:** Hide & Seek Demo  
Technical Paper  
Engineering Journal

## Week 1

### + Complete RobotC Packet I & II

6/27	Mon	2:30 - 4:50		7:30 - 10	
6/28	Tue	2:30 - 4:50	Class: + Quick overview of the final goal of the project. + Review milestones. + Using forum.stormingrobots.com + Learn about writing engineering journal. (MUST record all work). Engineering Journal vs. Technical Paper. + Lecture on Ch1 to 4/Packet I	7:30 - 10	No Class. Own time: + <b>Build a simple robot</b> + Complete all sample exercises from Ch1 to 4.
6/29	Wed	2:30 - 4:50	Class: + Review status from Eng. Journal + Review issues for exercises, if any, until 3:30. + Cover Ch5 & 6 –Mechanical Math & Intro to motor feedback control.	7:30 - 10	No Class. Own Time: + Complete the project in Ch4. + Work on all exercises from Ch5 and 6.
6/30	Thurs	2:30 - 4:50	Class: + Review status from Eng. Journal + Review issues for exercises, if any, until 3:30. + Lecture on Ch1 to 5 / Packet II.	-	+ <b>Complete all exercises in Packet I.</b> + Start working on exercises Ch1 to 5/Packet II.
7/1	Fri	2:30 - 4:50	No Class. Own time: + Continue to work on Exercises in Packet II>	7:30 – 10	No class. Own time: + <b>Complete all exercises in Packet II.</b>
7/2	Sat	3 to 6	Class: + Review status from Eng. Journal + Review issues for exercises, if any, until 4pm. + Lecture on Compass Sensor & GPS interface + <b>Assign Navigation component, Compass and GPS component.</b>		<b>Build the GPS bot chassis.</b> Continue to work on the Navigation component.
7/3	Sun	3 to 6	Class: + Pending; depends on progress		

\*\*\* You may choose to utilize the forum for your engineering journal media. Regarding blueprint of your robot, you may take pictures. By the time you are almost done, you can combine the pictures and data recorded from the forum to print out your engineering journal.

**Instructor: Elizabeth Mabrey, MSCS**

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**Week 2**

- + Complete Navigation Component
- + Complete Compass & GPS Component
- + Complete the Integration of Compass and Navigation component
- + Complete Technical paper Draft on Navigation and Compass Component

7/4	Mon		No class.		
7/5	Tue	2:30 - 4:50	No class. Own Time: + Complete the Navigation Component	-	
7/6	Wed	-	No class. Own Time: + Work on Compass component from Compass Packet	7:30 - 10	No class. Own Time: Complete Compass Component
7/7	Thur	-	No class. Own Time: + Work on GPS component from Compass Packet	7:30 - 10	No class. Own Time: Complete GPS Component
7/8	Fri	2:30 - 4:50	No class. Own Time: Start to integrate Navigation, Compass and GPS components	-	No class. Own Time: Continue to work on the integration
7/9	Sat				
7/10	Sun				

**Week 3**

- + Complete Networking component
- + Start integration of Navigation, Compass and Networking component
- + Complete the full Technical paper Draft.

7/11	Mon	2:30 - 4:50	No class. Own Time: + <b>Complete Navigation, Compass and GPS components integration.</b>	7:30 - 10	Class: + Lecture - Networking Packet w/ XBee + Work on samples
7/12	Tue	2:30 - 4:50	No class. Own Time: + Work on exercises in Networking Packet + <b>Assign Networking w/XBee component</b>	7:30 - 10	Class: + <b>Transfer data from Eng. Journal to Technical Paper.</b>
7/12	Wed	2:30 - 4:50	No class. + <b>Complete the Networking component.</b> + Work on Technical Paper	7:30 - 10	Class: + Review status from Eng. Journal + <b>Work on Final integration:</b> Integrate Navigation, Compass Component and Networking component + Review Technical Paper Draft
7/14	Thurs	2:30 - 4:50	No class. + Continue to work on the final integration and Technical Paper	7:30 - 10	Class: + Continue to work on the final integration and Technical Paper
7/15	Fri	2:30 - 4:50	<b>Draft on Tech paper Due</b>	7:30 - 10	Own Time: + Continue to work on the final integration and Technical Paper
7/16	Sat				
7/17	Sun		*** More focus on the Technical Paper, but continue to do minimum update on Eng. Journal if possible.		

**Week 4**

- + **Final Presentation**

7/18	Mon	2:30 - 4:50	No class: + <b>Complete the Final integration</b>	7:30 - 9pm	Class. (7 to 9) + Review Technical Paper + Final integration & Tune up
7/19	Tue	2:30 - 4:50	Class: + Final integration Tune up + Final brush-up on technical presentation + <b>Mock Technical Presentation</b>	-	No class. Own Time: + Practice and Tune-up.
7/21	Thurs	2:30 - 4:50	No Class: + Practice and Tune-up.	7:30 - 9pm	Class. (7 to 9) + Pending, depending progress
7/22		2 to 4	<b>Final Project Presentations</b>		

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