

Spring Project Work Breakdown

The following milestones represent a timeline of the tasks that need to be completed in the Spring 2019 semester. The primary tasks are the frame assembly, power system integration into the frame, programming of the control system, testing of the various modules, modifications to modules, presentations, Engineering Design Day, and the final project demonstration. The final project must be completed by April 26. There is a Gantt chart separated into two parts to help with legibility and provide a visualization of the timeline. This was an entrepreneurial project, which required us to enter the Jim Moran School of Entrepreneurship InNOLEvation Challenge and the FAMU-FSU Engineering Shark Tank.

Milestone 1: First week of the Spring 2019 semester

- Set up a team meeting to discuss the tasks that need to be completed this semester
- Update Spring Project Plan
- Update each team members schedules on Google Calendar
- Set up a meeting with the sponsor to discuss the InNOLEvation Challenge Stage 2
- Set up a meeting with the advisor to discuss frame drawings and components
- Contact the machine shop regarding welding for the frame of the RTC

Milestone 2: January 15

- Prepare for VDR4 – 1st senior design presentation
- Finalize parts for the frame, power system, drive system, and control system
- Order parts

Milestone 3: January 31

- Complete advisor and sponsor meetings
- Begin assembly of frame
- Complete final draft of business model canvas for the InNOLEvation Challenge
- Prepare InNOLEvation Challenge semifinal business pitch
- Begin developing the website
- Prepare for VDR5 – 2nd senior design presentation

Milestone 4: February 28

- Complete the frame, excluding the gates
- Meet with advisor and sponsor
- Apply for the Engineering Shark Tank
- Begin wiring of the RTC
- Begin coding of the control system
- Push an update to the web page

Milestone 5: March 15

- Begin prototype testing of power system and control system
- Complete Engineering Shark Tank Round 2 submission
- Complete Risk Assessment
- Begin operations manual
- Prepare for VDR6 – 3rd senior design presentation

Milestone 6: March 31

- Meet with sponsor and advisor
- Push update to the web page
- Prepare poster and presentation for Engineering Design Day
- Continue testing on the control system

Milestone 7: April 14

- Complete poster and presentation for Engineering Design Day
- Finalize wireless controller
- Prepare for project demonstration

Milestone 8: April 26

- Complete prototype
- Prepare for final project demonstration
- Complete evidence book
- Push last update to the web page

The following is a Gantt chart for the Spring 2019 semester. Figure 1 shows the project tasks and assignments outlined in a table view. The assignments are delegated to specific team members.

TASK NAME	START DATE	DAY OF MONTH*	END DATE	DURATION* (WORK DAYS)	DAYS COMPLETE*	DAYS REMAINING*	TEAM MEMBER	PERCENT COMPLETE
Second Semester of Senior Design								
Innovation: Stage 2 Business Model Canvas	1/6	6	1/14	9	9	0	Oscar	100%
Advisor Meet & Greet	1/7	7	1/11	5	5	0	All	100%
Abstract	1/8	8	1/11	4	4	0	Oscar & Jacob	100%
Budget Update	1/9	9	1/18	10	10	0	Oscar & Jacob	100%
Web Master	1/10	10	1/18	9	9	0	Oscar	100%
Advisor Meeting 1	1/11	11	1/31	21	21	0	All	100%
Web Page Development	1/12	12	2/1	21	21	0	Oscar	100%
Innovation: Stage 3 Final Business Model Canvas	1/13	13	2/6	25	25	0	Oscar	100%
Innovation: Semi-Final Presentation Judging	1/14	14	2/8	26	26	0	All	100%
Shark Tank Application	1/15	15	2/8	25	25	0	Oscar	100%
DR5 (Senior Design Presentation)	1/16	16	2/18	34	34	0	All	100%
Advisor Meeting 2	1/17	17	2/28	43	43	0	All	100%
Risk Assessment	1/18	18	2/28	42	42	0	All	100%
Web Page Update 1	1/19	19	3/1	42	42	0	Oscar	100%
Shark Tank Round 2 Submission	1/20	20	3/8	48	48	0	Oscar	100%
Shark Tank Preliminary Round Business Pitch	1/21	21	3/8	47	47	0	All	100%
DR6 (Senior Design Presentation)	1/22	22	3/25	63	63	0	All	100%
Operation Manual	1/23	23	3/29	66	66	0	Lead: John	100%
Web Page Update 2	1/24	24	4/5	72	72	0	Oscar	100%
Engineering Design Day	1/25	25	4/18	84	84	0	All	100%
Final Report	1/26	26	4/26	91	91	0	Lead: Oscar	100%
Prototype Demo	1/27	27	4/26	90	90	0	All	100%

Figure 1: Table View of the Spring Semester Gantt Chart

Figure 2 shows a calendar view of the project tasks and assignments for the spring semester. An IDA chart was also used to track progress on specific assignments. The IDA can be found on the project website.

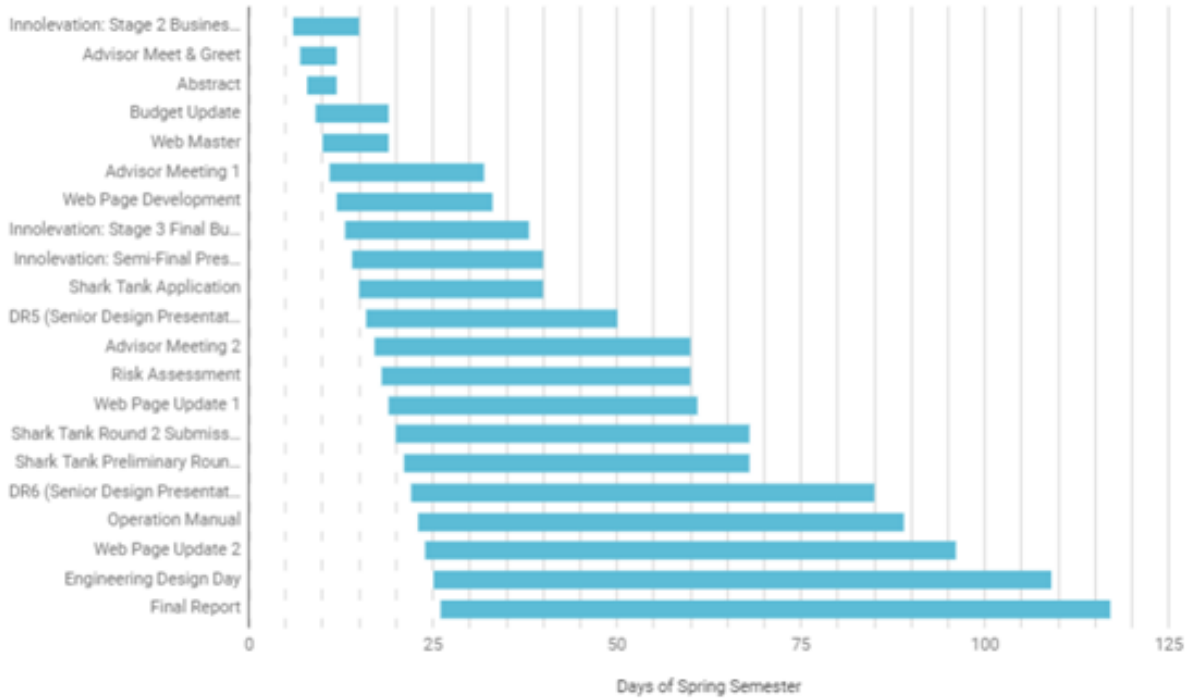


Figure 2: *Calendar View of the Spring Semester Gantt Chart*