



Preliminary work	Week 1	Week 2-3	Week 4-6	Week 7- 13	Week 14	Provided to the students prior to the task	Outcome	Documents provided to the students
Tutorials							Students have learned key competences needed to work on the contest. Students have identified contacts for the different topics for future questions and support.	
	Function analysis /solutions identification					List of key function they will have to perform (locomotion, navigation, collection, sorting, drop	List of potential technical solution to fulfill the key functions. Review of existing solutions (litterature, web scouting, etc.)	Example of function analysis + reference book
		Function analysis / solutions refinement and selection				Explanation of risk analysis and fail safe concept.	Ranking of solution for each key function with argumentation of choice. Plans for their try out phase (week 4 to 6). Risk analysis and fail safe solution proposed. Presentation of their concept (rough).	Excel table used for risk analysis
			Development of key function individually. Refinement of design. Planification of project.				Validation of solutions planned for each individual function. Students master the different key functions or have a clear understanding of the development needed to get them working. Tasks are clearly defined within the group (who does what internally and externally). Contacts have been taken with material providers, workshops, etc to get a clear understanding of feasibility and deadlines (machine time, delivery, etc.). Presentation of their concept (detailed). Planning and Gantt diagram of the tasks for development between week 7 and 13. Budget estimate. Update of risk analysis and fail safe solution proposed.	Explanation of "Gantt chart" and planification.
				Development and production according to planning.			Functioning robot ready for trials and fine tuning.	Project follow-up (document and short meetings)
					Trials and optimization		Fine tuning of solution to have it ready for contest	

Milestones

- 1 Presentation of solutions identified to perform the functions, selection and justification

- 2** Presentation of the concept (first rough geometry and options). Analysis of the implication and definition of workplan for week 4 to 6
Concept features and dimensions to be frozen
Interaction between different topics and way to handle them
- 3** Presentation of the project and detailed solutions planned
Presentation of the planning, the different tasks, parts that will be made internally and externally (who does what for when)
Fail safe analysis
Budget estimation
- 4** Final report and presentation