

## 1 Rubric and instruction for graders

### Assessment sheet RMPC project

Your work needs to meet the following requirements in order to be marked:

Requirement	Ok?
Report: maximum 4 pages in provided template	Y/N
Presentation: stays within the allotted time	Y/N
Code: is provided	Y/N

Table 1: Knockout criteria

Your work will be assessed using the following rubrics:

Levels (points) Criteria	Insufficient (3)	Sufficient (6)	Good (8)	Excellent (10)
<b>Presentation: Model and planning S2</b>	Several elements missing or incorrect	Model or planning method introduced	Both correct	... and well motivated
<b>Presentation: Results S3</b>	Inconclusive results	Results are presented	... and properly described/justified	... and satisfactory results shown (in a video)
<b>Presentation: Discussion S4</b>	Several elements missing or incorrect	Minimal discussion on performance	Correct discussion on performance	... and shortcomings

Table 2: Rubric of presentation for project RMPC. The relevant sections are specified with SX, with X the number as in the deliverables (see description of the project).

<div>Levels (points)</div> <div>Criteria</div>	Insufficient (3)	Sufficient (6)	Good (8)	Excellent (10)
<b>Report: Introduction S1</b>	Several elements missing or incorrect	Contains a description of the work and reference to materials employed	... and a valid justification of the chosen methods	... and a detailed comparison with respect to state of the art
<b>Report: Model S2A</b>	Several elements missing or incorrect	Minor errors in the formulation	Mathematical formulation is correct	Mathematical formulation is correct and variables are individually explained
<b>Report: Work-/Configuration-space S2B</b>	Wrong spaces described	Minor errors in the formulation	Mathematical formulation is correct and variables are individually explained	... and good description
<b>Report: Planning S4</b>	Several elements missing or incorrect	Minor errors in formulation	Algorithm and description are correct and variables are explained	... and correctly adapted to the robot model
<b>Report: Results S5</b>	The performance is not shown or the evaluation is not sufficient	The performance of the planner is verified in simulation and evidence is provided	... descriptions are clear and relevant	... evaluated in multiple scenarios and performance statistics are given
<b>Report: Discussion S6A</b>	Several elements missing or incorrect	Theoretical and practical discussions with minor shortcomings	... are all correct and justified	... and are complete (the main theoretical and practical aspects are discussed)
<b>Report: Future works S6B</b>	Improvements not discussed or wrong justification	Improvements are discussed and valid, with minor shortcomings	... are correct	... and justified

Table 3: Rubric of report for project RMPC. The relevant sections are specified with SX, with X the number as in the deliverables (see description of the project).

Levels (points) Criteria	0	+ 0.5	+ 1	- 0.5	- 1
<b>Originality</b>	Basic extension of exercises/lecture	Some element of novelty/difficulty wrt lecture and/or exercises	Complex project with several elements of novelty/difficulty		
<b>Implementation</b>	Existing code used with very minor improvements	Methods implemented, partially relying on existing code	Difficult methods implemented		Only existing code is used and the sources are not described in the introduction
<b>Late submission</b>	Submitted on-time			Late submission 0.5 x number of days	
<b>Number of pages</b>	Page limit OK			Additional pages 0.5 x extra page	

Table 4: Bonus and negative points

Your assignment grade will be decided as follows:

[Group grade] =  $\sum([\text{Part grade}]/10 \times [\text{Percentage part}])$  + bonus, (maximum 100%)

where the percentage of each part is specified in the assignment description.

[Individual grade] = [Individual performance factor] x [Group grade] (maximum 100%)

The 1-10 grade is then:  $[\text{Individual grade}]/10$ , rounded at one decimal point.