

Conceptual Part (50pts)

Chapter	Name	Suggested Substructure and Content	Range / AoL	Pts
1	Technical abstract	A technical abstract is a concise summary of the work, typically around 250 words. It can be either structured (e.g., including sections such as purpose, methods, results, and conclusion) or unstructured. The goal is for the student to learn how to create a concise technical summary of their work.	½ page AoL 17	1
2	Lay summary	A lay summary is a brief explanation of a research paper written in simple, non-technical language. Its purpose is to show student's fluency in communicative skills to a general audience in a concise manner. Lay summary should have up to 250 words and is unstructured.	½ page AoL 17	1
3	Introduction	Students should outline the problem domain, highlighting its current challenges and guiding principles, and discuss the interdisciplinary aspects involved.	½ page AoL 1	2
4	Problem statement and solution (35pts)	<ul style="list-style-type: none"> • Problem statement: Students should demonstrate problem understanding in all its complexity and outline it in a simple and concise manner. To this end, students should select and apply modern computational analytical tools and techniques. • Technical literature review: Has this problem been tackled by other people / in other domains? Select and evaluate technical literature and summarize most appropriate solutions, compare their strengths and limitations. • Solution overview (high level): Concisely explain problem solution. Students should be able to justify their choice of techniques used to address the problem at hand, recognizing their limitation and interdisciplinary reach. • Risk assessment: Students should recognize risks attached to how they implement their solutions and offer mitigation strategies. • Experimental reproducibility and integration: The solution engineering phase should be conducted with reproducibility and systems integration in mind and students should describe how they tackled this aspect in detail. • Unless special conditions apply, code, models and data used for solution engineering should be freely available. Machine learning models should be presented to allow further use without retraining. • Where possible, use docker-ized solutions ensuring product or service can be used even if the underlying technology changes. 	½ page AoL 2-3 1-1½ pages AoL 4 2-3 pages AoL 5 up to 1 page AoL 9 3 pages AoL 6	3 5 7 2 10

		<ul style="list-style-type: none"> • Sustainability and environmental impact: Students should describe how would they implement measures ensuring sustainability of their product or service during lifecycle. • Employability: Students should be able to reason why knowledge and skills that they have learned during bachelor work will help them to secure better position on job market. • Teamwork, diversity and inclusion: When domain experts from multiple fields of study are involved in a project, student should implement processes and describe techniques for sharing tasks and (understanding) knowledge between different parties. Problems and mitigating strategies should be described to ensure that the project is finished within the given time schedule. This part should also involve consideration on diversity and inclusion matters. 	1-2 pages AoL 7	5
			½ page Not defined in AoLs	2
			½-1 page AoL 11, 16	2
5	Conclusions (5pts)	Students should summarize key aspects of their work, considering engineering and societal impact.	2 pages	5
6	References	Up to 70 references.	NA	
...	List of Figures, etc. Supplementary material		NA	5

The conceptual section should demonstrate the student's ability to situate their work within the broader context of socio-economic practice. Additionally, the student should be able to clearly articulate how their work integrates into software engineering practice, including the methods and principles applied and the rationale behind their choices. This part should contain no more than **15 pages** of text, excluding references and appendices.

The inclusion of **AI-generated content (text, figures, etc.)** in this section is permitted only within the scope allowed by the student's supervisor and must be acknowledged in the supplementary material. AI-generated content should be clearly **marked with a vertical bar** to distinguish it from the student's original work. Failure to properly attribute AI-generated content will result in a grade reduction to Fx and may incur additional severe penalties for the student. Additionally, **the student must fully comprehend the AI-generated content and be able to explain it thoroughly when asked.**

Scientific Part (50pts)

Use format typical for original articles: **3500 words**, up to 7 figures, one of two common layouts (abstract, lay abstract, introduction, results, discussion, methods, supplementary material and data) or (abstract, lay abstract, introduction, methods, results, discussion, supplementary material and data). The structure and range are only recommended and should be decided upon after consulting with *thesis* supervisor.

Students are expected to demonstrate their ability to communicate complex problem solutions effectively to a technical audience. **The use of AI-generated content is not allowed in this part.**