

PROJECT SPECIFICATION

Functional Safety of a Lane Assistance System

Project Documents

CRITERIA	MEETS SPECIFICATIONS
Have all of the documents been submitted?	<p>The submission includes all five documents in pdf format:</p> <ol style="list-style-type: none">1. Safety Plan2. Hazard Analysis and Risk Assessment3. Functional Safety Concept4. Technical Safety Concept5. Software Requirements and Architecture

Safety Plan

CRITERIA	MEETS SPECIFICATIONS
Does the submission demonstrate a working knowledge of how to develop a safety plan?	<p>All required sections of the template are filled out and contain answers:</p> <ol style="list-style-type: none">1. purpose of the safety planitem definition2. goals and measures3. safety culture

	<ol style="list-style-type: none"> 4. safety lifecycle tailoring 5. development interface agreement 6. confirmation measures.
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Hazard Analysis and Risk Assessment

CRITERIA	MEETS SPECIFICATIONS
Does the submission demonstrate how to document a hazard analysis and risk assessment?	The hazard analysis and risk assessment is completed for lane departure warning and lane keeping assistance functions using the Excel template.
Does the submission include two other reasonable hazard analyses for the lane assistance system that were not discussed in the lessons?	Besides the two analyses from the lecture, the project includes two extra hazard analyses and risk assessments. These two extra analyses include a situational analysis, hazard identification, hazardous event classification, ASIL and safety goals. The two hazards are related to the Lane Assistance Item.

Functional Safety Concept

CRITERIA	MEETS SPECIFICATIONS
Does the submission show an understanding of how to document a functional safety concept?	All required sections from the functional safety concept template are complete.

Technical Safety Concept

CRITERIA	MEETS SPECIFICATIONS
Does the submission demonstrate an understanding of how to document a technical safety concept?	All required sections of the template are filled out. The five technical safety requirements for the lane departure warning amplitude, as taught in the lessons, are documented correctly.
Does the submission show a knowledge of how to derive technical safety requirements?	Technical safety requirements are derived for the lane departure warning frequency malfunction and the lane keeping assistance time malfunction.

Software Requirements and System Architecture

CRITERIA	MEETS SPECIFICATIONS
Does the submission demonstrate an understanding of how to document software safety requirements and a software architecture?	<p>All required sections of the software requirements and architecture documents are complete (inputs to software requirements.., software requirements, and refined architecture).</p> <p>The submission documents software safety requirements for the lane departure warning amplitude malfunction only, which were given in the lessons.</p>