



ASPARi

Paving the way forward

Bachelor Project in the ASPARi research unit

Company and Location	The student will initially be based in the ASPARi research unit at the UT. This project requires that the student undertakes several asphalt site measurements and will therefore, with the support of the research unit, visit several asphalt paving construction sites.
Type of project	Bachelor Project
Title of topic	Developing generic cooling curves for Dutch asphalt mixes.
Project background / context	<p>The temperature at which asphalt roads are being compacted has a high impact on the road's final density and quality. The time window in which the roller operators can compact the asphalt differs at every project, because of the changing variables such as weather conditions and asphalt mixes that influence the cooling behaviour of the asphalt.</p> <p>This project is aimed at developing generic cooling curves for Dutch asphalt mixes that will describe the cooling process of asphalt under different circumstances. By doing so, the optimal compaction time window can be predicted for different Dutch asphalt mixes, which is not yet done using empirical data analysis.</p> <p>This project will require the student to retrieve data from asphalt paving projects, evaluate this data and develop the generic cooling curves based on the findings. To produce accurate generic cooling curves the student must be precise, creative and innovative. Programming skills (e.g. Matlab, Java, etc.) and data analysis experience are recommended but not mandatory.</p>
Research method	Empirical study
Contact(s) at the company / UT	k.k.ongafat@utwente.nl
Start date	ASAP
Contact at the UT	Keoma Ong-A-Fat k.k.ongafat@utwente.nl or Seirgei Miller s.r.miller@utwente.nl