

## Internship Vacancy (2x)

<i>Title of the project</i>	LCA 3D Printed Splint vs. Regular Cast
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<i>Topic</i>	LCA 3D Printed Splint vs. Regular Cast
<i>Techniques</i>	Life Cycle Analysis
<i>Time period (months)</i>	Anywhere between 3 and 6 months depending on the progress.
<i>Short description of the proposed internship</i>	<p>The standard treatment for fractures and other musculoskeletal injuries is with a plastic cast. This method is stressful for the patient (think of discomfort, pain, complications and cast changes) and for the environment (production and transport overseas, packed per piece, more products needed per treatment, used once, particulate matter is released when removed, after use not recycled). There is a new alternative for this: 3D-printed splints. In addition to many benefits for the patient, this also has benefits for the environment: local manufacturing and recyclable. In your research/internship you perform a life cycle analysis (LCA) of either the normal plastic cast or that of the 3D-printed splints. The analysis produces recommendations for the treatment of patients based on sustainability considerations.</p>