

The ThermoPlastic composites Application Center is always looking for enthusiastic and motivated students interested in an internship or graduation assignment in the field of composite materials. Are you a MBO, HBO or WO student with a background in Mechanical Engineering, Mechatronics, Chemistry or another technical education, and are you looking for an internship or graduation assignment? Contact us!

Testing layer adhesion of 3D-printed parts

At TPAC, we work on 3D printing large-scale objects. When making these objects, it is important to ensure that they are strong enough and an important property here is the layer adhesion; how well the layers stick together. In this assignment, you will focus on testing this property.

There are multiple ways to test the layer adhesion, such as performing a tensile test to pull the layers apart, or applying shear stress to the layers. You will learn all about these methods, execute them and compare the test results. For this you will use the machinery in our laboratory such as the tensile tester and the CNC-milling equipment. No prior experience with testing equipment is required, but affinity with material science and mechanics of materials is important.

Tasks

In the assignment, you are tasked to:

- Perform research on the different testing methods
- Set up an experimental plan
- Execute your experimental plan
- Document and interpret your results.

Other information

We are seeking a motivated student enrolled in a **HBO or WO** program in **mechanical engineering or mechatronics** for a **6-month internship**. As an intern at TPAC, you will have a desk in our office and receive a gross trainee compensation of €475 per month.

Interested? Contact us!

Join us to enhance your skills and grow professionally in a dynamic and supportive environment. Please send an email addressed to:

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