Background

The front attachments used on current Philips IPL devices have been developed to provide safe and comfortable treatment of different body areas. Their fundamental shapes, however, originate from designs created around a decade ago. Meanwhile, both technology and the way of using IPL are evolving.

As IPL treatment routines are gradually changing, we want to reconsider the interface between the device and the human body. What is the ideal size? Could different curves improve contact with the skin? Can an attachment slide more naturally across areas such as legs, underarms, or the bikini area? And what design freedom do we have while still meeting sensor, performance, and safety requirements?

Assignment

In this project, you will explore how the geometry of IPL attachments can be optimized for the next generation of Philips IPL devices.

You will start by understanding the problem from different perspectives: consumer experiences with existing products, competitor designs, human-body geometry and ergonomics, relevant medical literature, technical constraints, and knowledge from previous Philips developments.

Based on these insights, you will develop a series of new attachment concepts and turn the most promising ideas into physical prototypes.

Description of assignment

- Identify the most important user, technical, sensor, optical, and safety requirements.
- Investigate consumer feedback, competitor products, ergonomic and medical literature, and previous Philips projects
- Explore alternative attachment sizes, shapes, curvatures, treatment-window geometries, and skin-contact concepts.
- Use CAD and rapid prototyping to turn promising concepts into physical prototypes.
- Evaluate the prototypes through practical experiments and user interaction, and iterate the designs based on your findings.
- Conduct a consumer study to compare the final concepts with current solutions.

- Report with recommendations for future IPL attachment design.

This is a multidisciplinary project combining **user research, industrial design, mechanical engineering, prototyping, experimental testing, and consumer evaluation**. There is considerable freedom to explore different directions, and the final scope can be tailored to your background and interests.

We are looking for

To succeed in this role, you have the following skills and experience:

- Affinity with biomedical device design and consumer health technologies.
- Professional skills in English (written and verbal).
- Team player, passionate about results and people.
- Skills CAD design, prototyping, and experimental design.
- Hands-on mentality, creative and result driven.
- Student open to learn new competences, like technical subjects, research, development, consumer research, etc.
- Able to work mainly on site (Drachten) for at least 3-4 days per week.

You will be part of

In Drachten you'll find one of the largest innovation sites of Philips globally. With over 2000 colleagues from over 35 different nationalities, it's an inspiring environment for you as a young talented intern. At Philips Drachten some of the best consumer product developers in the world work together to create innovative products with excellent end-user experience.

Our offer

Philips Drachten could be the start of your promising career, with lots of opportunities to develop yourself locally or internationally in different sectors of our company. At Philips you work for an employer whose activities have a major positive impact on people all over the world. You also get:

- Opportunity to strengthen your capabilities and knowledge.
- Dedicated substantial support and guidance from an experienced supervisor and support from several professionals and departments.
- You will receive an internship allowance.
- Within Philips you get the opportunity to expand your professional network.