

APPLIED RESEARCH & INNOVATION CENTRE

The Applied Research & Innovation Centre (F&ICK) strives to ensure that KEA develops a strong practice-based strategy in all of its academic programs. This occurs through cross-institutional research projects, international exchange programs, professional interactions and research-based collaborations with various companies.

KEA supports the students' work practices so that their learning and skills can be translated into actual projects, which provide the students with knowledge, and also the experience of working with real issues. F&ICK helps the students gain the experience of applying their knowledge to practice.

KEA also places an emphasis on promoting the students' academic empowerment through educational programs and projects that are at the same level as businesses and society and equip students to act based on their professional knowledge, while giving them an understanding of what differentiates their skills from the other students.

F&ICK focuses on four main areas that complement each other and contribute to an inter-professional education. The emphasis is on didactics, entrepreneurship, knowledge communications and materials & technology.





THE BOX, THE LAB, THE LIBRARY ...

Material Design Lab is a department within F&ICK that was created to develop and disseminate knowledge on sustainability and innovation in materials and production.

Material Design Lab consists of 'The Box' - a collection of basic materials, 'The Lab' - a laboratory where materials are tested and developed, and 'The Library' - a physical and online material library from Material ConneXion - a collection which is currently one of the largest in Scandinavia.

The Material Design Lab is available to all KEA's students and faculty as well as external researchers, businesses and institutions. The Material Design Lab is also building an open source network for the development of sustainability and innovation in materials - nationally and internationally.

The collaboration with NIKE is an excellent example of how students develop products and tackle specific challenges thereby ensuring a high academic level and the student's capability to act in the professional realm.

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KEA MEETS NIKE

With only a short time frame given, students from KEA had to develop products, either in the form of clothing or accessories, based on NIKE as a casestudy and NIKE's core concept of 'Performance'.

The focus of the project was materials and sustainability. The students worked with issues concerning sustainability, manipulation and innovative properties.

The students got to test out NIKE's app Making to assess the level of sustainability in their choice of materials.

Sustainability was not only a characteristic in the actual materials used for this project, the students also had to use the methods and techniques based on the principle of Zero Waste; an approach to the design and patternmaking processes, where there is no material waste in the production.

The project was structured around a student-developed design brief, which included the design, business and sociological aspects.



Anne Sofie Renkwitz's zero waste garment can be used both as a skirt and a jacket allowing the consumer to purchase less items but still be able to get variety from their clothes. This makes it more likely to be part of their wardrobe for many years.

All pieces, including trimmings, are made from white recycled polyester.











The NIKE Making app became like a game of Angry Birds for Nanna Zimmer. She competitively tried to beat her own score. During this process Nanna went through a number of various materials trying to get a better score on the app. This in turn led to her having to change her design.

Her final design is a multi-functional, unisex bag that can expand and retract to suit the user. It is made from 100 % recycled polyester with detachable leather details.









TINA REBEKKA

Tina Rebekka Finderup interviewed physiotherapists and other experts to find out more about the requirements for a good recovery after sport performances.

Combining the fully-fashioned priniciple in her designs along with material containing FIR technology – perfect for transporting body heat back in to the muscles - leads to a look that is truly timeless.







OAHN

Hoang Oanh Thi Nguyen did not want to stray too far from NIKE's current design DNA but instead chose to focus on making work-out gear that could also be worn as street wear.

The garments in this 2-in-1 design are made entirely from Dri-FIT recycled polyester.

ANNE & MIE

Anne Clausen & Mie Marschall's design was initiated by filming dancers and subsequently using the pattern of their moves to create a feminine design that includes fashion, comfort and function.

Recycled polyester was chosen for the pieces that need strong wear-resistance and the other pieces are made of organic cotton. The style is constructed of individual mono-material pieces for easy recycling.







NINA & PERNILLE KRISTINE

Nina Harris & Pernille Kirstine Frium's garment follows the design DNA of NIKE focusing of high-performance and functionality targetting break dancers.

They worked quite a lot with the NIKE Making app to find their best option in materials that are durable as well as sustainable.



Inspired by biomimicry, Dirk Natorp studied bee hives in an effort to learn more about zero waste. Using tessellation, the experimentation with the ma-terial was the driver for the creation of the design.

This SB shoe could essentially be made from all kinds of leftover materials and would mean that each shoe would be unique.





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