

# The RACE - PRO

Lifelong Learning | Innovation Management Processes & Skills  
Experienced R&D Professionals | EIT RawMaterials | Industry Partners | Start-ups

## Course Concept

Major shifts in technologies and increasing competitive pressures mean that companies need to accelerate their technology adoption rates as well as the pace of research commercialisation. This is the purpose of Innovation Management processes - and a key role of EIT RawMaterials.

EIT RawMaterials is therefore offering a course with the aim of **deeping the expertise of R&D professionals** in the **practices of leading and working with Innovation Management processes**.

This course is targeted at experienced people, who are working in EIT RawMaterials industry partners or supported startups, with research roles such as team leader, expert advisor, process responsible or project coordinator.

The course involves a series of three study visits to host industry partners at different stages of the value chain. Each study visit will be two days long. The study visits will be spread over six months.

During the course, **participants will hear from R&D professionals** in the host companies **about how they are innovating** and **innovation management processes** - and reflect on how they can improve their own innovation management skills.

A common theme of all 3 study visits is the transition to electric mobility. This transition will affect many industry partners in different ways. Moreover, we are in a unique position of being able to reflect on each company's individual innovation management case before they are written in the textbooks.

## Programme outline

### Study Visit 1: Mining & Mineral Processing - Enabling sustainable sourcing of battery materials

Innovations in mineral processing plant design are needed for mining companies to sustainably produce the battery materials of the future. This is one speciality of Outotec, a knowledge-based company that supplies processing equipment to many industries.

In this study visit, Outotec will discuss how they innovate to create bespoke mineral processing plants using a combination of technology platforms, product platforms and R&D competences. The study visit includes a tour of the R&D labs where Outotec starts to analyse their mining customer's needs.

*Innovation Management Learning Goal: Using technology and product platforms.*

Option to arrive in Espoo, near Helsinki on the evening of 22 Oct. 2019.

Start 23 Oct. at 09:30 EET in Open Innovation House, Espoo (near Helsinki), Finland.

Ends 24 Oct. at 17:00 EET Helsinki Airport, Finland.

### Study Visit 2: Metals Processing – Playing a role in the shift to AM in vehicle component production

Electric vehicles also require novel lightweight components and magnetic materials. These fields are a speciality of Höganäs, a powder producer that also supplies component production technologies to manufacturing companies.

In this study visit, which includes a tour of powder production and additive manufacturing sites, Höganäs will discuss their ongoing transformation from being a powder supplier to an innovative service partner to component manufacturers – and other fundamental business renewals in the 200 year long history of Höganäs.

*Innovation Management Learning Goal: Understanding the role of path dependencies in innovation processes.*

Option to arrive in Lund on the evening of 10 Dec. 2019 (fly to Copenhagen Airport, Denmark)

Start 11 Dec. at 09:30 CET in central Lund, Sweden

Ends 12 Dec. at 16:00 CET at Lund Central Station, Sweden

### Study Visit 3: Material recovery - Engaging ecosystems for shifting technology platforms

Rare earth materials are key to the functionality of batteries and electric vehicles components. Recycling vehicles/batteries to recover rare earths and other material products is therefore seen as a business opportunity by Umicore. This however requires a fundamental shift in recycling technology platforms from pyro to hydro metallurgy – and other innovations.

In this study visit, Umicore will describe how they are working with an ecosystem of partners in order to develop an economically viable process to recover rare earths from electric vehicles. At VITO, we will see novel battery technologies as well as technology platforms for waste characterization, material detection and recovery.

*Innovation Management Learning Goal: Shifting technology platforms.*

Start by arriving in Brussels on the evening of 23 March 2020 for morning pick  
24 March at 10:00 CET VITO - Boeretang 200, BE-2400 MOL Belgium  
Ends 25 March at 15:30 Umicore HQ, Broekstraat 31 Rue du Marais, Brussels

## Other course information

### The course workload is:

1. Participation, in person, at 3 study trips (see above), each of which are 2 days long.
2. Working on course assignments between study trips.  
Each assignment will involve 1-2 days work at your own company, at your own pace.  
Plus participation, online, at a half day seminar.

### Who is eligible to join this course?

R&D professionals, employed in companies, with a minimum of 5 years experience - where the companies are either industry partners in the EIT RawMaterials consortium or are SMEs that have been supported by EIT RawMaterials.

### EIT RawMaterials COVERS COURSE COSTS

Tuition fee costs are waived. Furthermore, EIT RawMaterials covers the costs of participating in the programme, from the start to end points of each study visit. That is, the costs that are covered are: 1 or 2 nights hotel accommodation for each study visit; meals during the study visits; as well as bus transfers between site visits. Accommodation will be booked by EIT RawMaterials.

### Costs that you need to cover

The costs to and from the start and end point of the study visits - presumably 3 return flights and public transport to/from airports.

### The application process

Stage 1. The deadline for applications is 17:00 on 30 Sept. 2019

Stage 2. Applications will be evaluated and scored, then selected to balance participation from companies along the value chain

Stage 3. Selected participants will be informed by 12:00 on 4 Oct.

Stage 4. Selected participants must confirm their participation in all 3 study visits by 12:00 on 8 Oct.



Sign up here:

[www.lyyti.fi/reg/TheRACEpro2019](http://www.lyyti.fi/reg/TheRACEpro2019)

Questions?

Please feel free to contact [academy@eitrawmaterials.eu](mailto:academy@eitrawmaterials.eu).

