

PRME Report 2019-2021

PRME Principles for Responsible Management Education



MÄLARDALEN UNIVERSITY
SWEDEN

Mälardalen University
School of Business, Society and Engineering

PRME

This is our **Sharing Information on Progress (SIP)**
Report on the Implementation of the Principles for
Responsible Management Education



EFMD

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Letter from the Dean

It is with great pleasure that we present our second progress report to PRME. We do so at a time that has forced us all to reconsider what can be taken for granted and to realize that we can never be sure of what awaits us round the next corner. Of course, handling the pandemic has been the main priority for all of us in the last year. It has been extremely challenging, and still is, but at the same time we have risen to the occasion by finding new ways to work, teach and carry out our research in a mandatory remote and online environment. I think we were all a little surprised that this rapid transformation proved to be possible when it became necessary, but it has also made us realize that radical changes can be made if need be. This a very inspiring insight if we look at our ambition to contribute to a more sustainable future.

Since the last report, both the University and the school of EST have seen very positive developments. This year, we have a new vision, one that places a contribution to a more sustainable future at the heart of our mission. Now the work begins to map and identify what this means in practice for our education, research and work environment, and it is with high expectations that we now set out to work on this transformation as well.

Västerås, 21 April 2021

Thomas Wahl
Dean, School of Business, Society and Engineering
Mälardalen University



Foreword to this second edition of the PRME Report

The first edition of the PRME Report (2017-2018) represented an important step for our University to demonstrate MDU's historical commitment in terms of ethics, responsibility and sustainability, in particular as regards our work environment and conditions, and the synergies between education and research and its local partnerships.

It also offered an occasion to position it with the other Swedish University signatories on these issues at an international level.

This second PRME Report (2019-2021) provides a broader, updated overview of our commitments in terms of responsible management education, and testifies to an even firmer engagement than in the past. You will also find in its pages the new vision MDU has recently adopted, in which the concept of sustainability is expressed with a clear sense of direction.

The purpose of this report is not only to keep trace of our "successes", but also to identify some of the lines of development we will be working on in the coming years in terms of responsibility in management education.

Lastly, PRME is not "just a report" delivered by single universities: it is also a community of universities that wish to share their practical experiences of how to integrate sustainability and responsibilities in educational programmes, and move them forward. In this regard, MDU is part of the PRME Nordic Chapter, which includes PRME signatories from the Scandinavian countries. It is in this forum that a dialogue has begun with the intention to develop common cross-border initiatives.

Dr. Silvia Bruzzone, Responsible for the PRME SIP Report

1. What is PRME?

PRME – Principles of Responsible Management Education – is a United Nations initiative launched in 2007. It represents the main worldwide initiative on responsible and sustainable management education, involving 800 universities around the world.

It is a platform “to raise the profile of sustainability in schools around the world, and to equip today’s business students with the understanding and ability to deliver change tomorrow” (PRME website).

How does it work?

The PRME website states as follows: “Working through Six Principles, PRME engages business and management schools to ensure they provide future leaders with the skills needed to balance economic and sustainability goals, while drawing attention to the Sustainable Development Goals (SDGs) and aligning academic institutions with the work of the UN Global Compact”.

This commitment on behalf of the University consists in putting in place six main principles:

1/ Purpose: We will develop the capabilities of students to be future generators of sustainable values for business and society at large and to work for an inclusive and sustainable global economy.

2/ Values: We will incorporate into our academic activities and curricula the values of global responsibility as portrayed in international initiatives such as the United Nations Global Compact¹.

3/ Method: We will create educational frameworks, materials, processes and environments that enable effective learning experiences for responsible leadership.

4/ Research: We will engage in conceptual and empirical research that advances our understanding about the role, dynamics and impact of corporations in the creation of sustainable social, environmental and economic value.

5/ Partnership: We will interact with managers of business corporations to extend our knowledge of their challenge in meeting social and environmental responsibilities and to explore jointly effective approaches to meeting these challenges.

6/ Dialogue: We will facilitate and support dialogue and debate among educators, students, business, government, consumers, media, civil society organisations and other interested groups and stakeholders on critical issues related to global social responsibility and sustainability.

At MDU, PRME identifies specific educational programmes (see Chapter 3), and more broadly a University framework and its multiple and long-lasting commitments to sustainability and responsibility. This is why this report will begin with an introduction to MDU’s history, organization and vision.

2. An introduction to MDU

2.1 A short history of MDU

Mälardalen University (MDU) was founded in 1977 as Mälardalens College (Högskolan) of Eskilstuna/Västerås.

The University is organized on two campuses on two sides of Lake Mälaren, where the cities are located. It was founded as a response to local needs for education in engineering. The area was already an important industrial hub, and ABB and other industries were among the major promoters of the project for a local educational institution. In the 1980s, a group of programmers from ABB moved to MDU and began a programme of research and education in robotics and programming, which are still two of the main disciplines that are taught at the school and draw students to it.

Other educational programmes were added in the 1990s, and today, the courses offer is organized into four separate schools: Innovation/Design, Education/Communication, Business/Engineering and Health/Welfare State.

In 1999, Mälardalen University was the first university in the world to be environmentally certified according to the ISO14001 standard. In 2006, it was the first university in Sweden to be certified for its sustainable work environment (Chapter 2). Today, it is one of Sweden's largest institutes of higher education, with 19,000 students spread across its various educational programmes.

In 2020, the Swedish government expressed its intention to formally recognize Mälardalen as the next university in 2022.

2.2 How MDU is organized

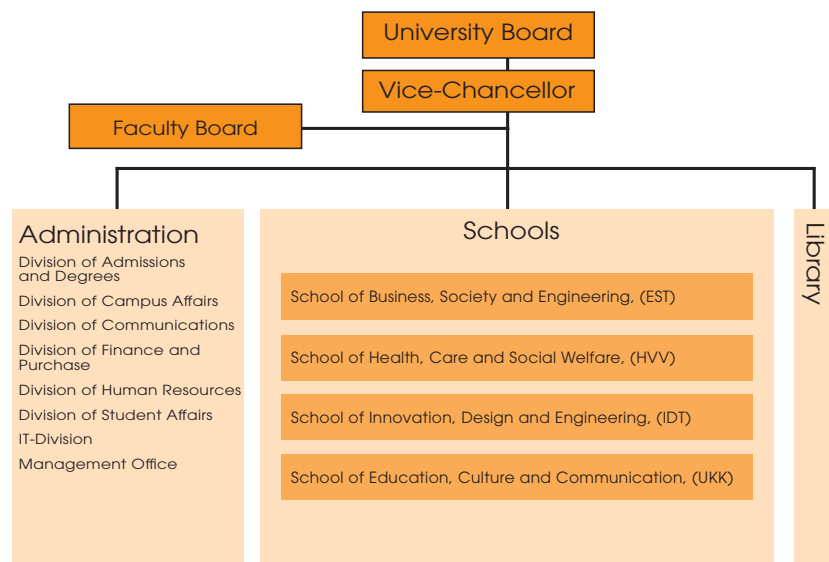


Figure 1: MDU organization

MDU is a state entity. Its central operations are led by the University Board. The Vice-Chancellor is the head of the entity, and answers directly to the Board.

The University Board takes the principal decisions at MDU and is responsible for the allocation of resources and for decisions on strategy and policy questions, among other things. The University Board has a mandate of three years.

The members of the University Board are appointed by the Government and represent both public institutions and organizations from the private sector. They are:

Pär Eriksson, Chairman: Former Municipal Director of Eskilstuna Municipality

Paul Pettersson, Vice Chancellor

Monika Samuelsson, Director of Health and Medical of Region Sörmland

Mikael Dahlgren, Research Director at ABB Sweden

Torbjørn Digernes, Professor at the Norwegian Institute of Technology

Eva Durhán, Head of Analysis at the National Agency for Education

Ulf Nilsson, Professor at Linköping University

Carina Malmgren, Strategist at Region Östergötland

Gunvor Kronman, CEO of Hanaholmen Finland

Also on the Board are the Vice-Chancellor of the University, three representatives of the teaching staff and three student representatives.

The Faculty Board is responsible for research and education. Its mission includes matters relating to strategy, planning and quality. The members of the Faculty Board (a Dean and four Pro-Deans) are elected, and each of the four Pro-Deans represents one of the four main disciplinary areas of the University.

Since 2008, MDU has been organized into four separate schools (as shown in the figure above).

The school is the organizational unit in which higher education and research are conducted. Each school is chaired by a Dean, who is selected by the Vice-Chancellor for four years. Even though some functions and positions are mandatory and common to all four schools, each school has a certain degree of autonomy in the way it is organized and according to its specific needs.

2.3 MDU's Vision. A university grounded on collaboration and co-production

Starting from 1 January 2021, MDU has new vision, which is formulated as follows:

We are a progressive university. In a changing world, we offer flexible and innovative research and education with high quality and technical excellence that stimulates students to curiosity, innovative ability, critical thinking and lifelong learning.

We create value through collaboration and co-production. Through unique collaborations between academia, civil society, business and the public sector, we generate value in a global society. Our co-producing research and educational environments are engines for knowledge development and innovation.

We shape a sustainable future. On a scientific basis, with an inclusive approach and long-term perspectives, our research and education work for social, ecological and economic sustainability.

MDU has a Research and Education Strategy that forms the basis of the activities of the entire University. This Strategy states that the University is working towards four common goals:

MDU offers high-quality education at the first cycle, second cycle and third cycle levels.

MDU produces recognized, and in some areas leading, research.

MDU has students and research students who are happy with their education.

MDU has staff and managers with the skills, willingness and capabilities to contribute towards the University's development.

Collaboration for the benefit of all

The Research and Education Strategy also states that MDU will take a leading position in the country as regards collaboration with the surrounding community. The University has a variety of strategic agreements with private enterprise and the public sector, which contribute towards strengthening the quality of the University's research and education and ensuring that the students' skills are in demand on the labour market.

MDU hosts three research centres that act as meeting places between researchers, students, private enterprise and the public sector: **The Social Contract** is a research centre within the public sector comprising MDU, Eskilstuna Municipality, Västerås City, Region Sörmland and Region Västmanland. **Automation Region** and **Robotdalen** are research centres that link the University's research and education with a large number of member organizations, most of which are in the private sector (see Chapter 4: Partnership and Dialogue).

Action plan for sustainable collaboration

MDU's goal is to be at the forefront of universities in Sweden when it comes to co-production. To achieve this, MDU developed an action plan in 2020 for sustainable collaboration and co-production for the years between 2020 and 2022. This plan will contribute to a systematic university-wide and long-term sustainable development towards collaboration as a quality-enhancing and natural part of MDU's research and education. The plan also aims at long-term sustainable economic, social and environmental action and activities, with the ambition to produce results that contribute to achieving the UN's global goals, as set by Agenda 2030 (see Chapter 5: How MDU Works with Sustainability Goals).

Close links between research and education

Part of the University's strategy is that research and education should go hand in hand, and proof of this is that it has signed what is known as the Magna Charta – a democratic agreement that more than 800 HEIs in 80 different countries have signed since 1988. The agreement highlights the HEIs' responsibility for education in society, and the fact that research and education comprise one unit, and not two separate parts.

The research conducted at the University, which is internationally outstanding in certain areas, serves as a scientific basis for its courses and programmes, and is of value and benefit to society.

MDU also works actively with equality issues and with developing digitalization of the University's activities. MDU's objective is to prepare its students for a changing society; this affects the content, form and pedagogy of the courses and programmes.

Constant ongoing quality work

Quality work is an important issue that is constantly being addressed within all activities and at all levels in the University. The Faculty Board has overriding responsibility for quality within the University's areas of research and education. Its purpose is for the Board to employ a quality system in order to identify and solve any deficiencies and ensure that the work develops constantly.

2.4 Facts and figures

- Organization and research are conducted across the four schools.
 - Business, Society and Engineering (EST);
 - Education Culture and Communication (UKK)
 - Health, Care and Social Welfare (HVV)
 - Innovation, Design and Engineering (IDT)
- 56 study programmes among the four educational areas.
- 19,000 enrolled students
- Courses taught in English:
 - Undergraduate level:
 - Analytical Finance (3 years, 180 credits)*
 - International Business Management (3 years, 180 credits, EFMD accredited program)*
 - Graduate level:
 - Caring Science and Nursing (2 years, 120 credits)*
 - Engineering Mathematics (2 years, 120 credits)*
 - Financial Engineering (2 years, 120 credits)*
 - Innovation and Design (2 years, 120 credits)*
 - Intelligent Embedded Systems (2 years, 120 credits)*
 - International Marketing (1 year, 60 credits, EFMD accredited program)*
 - Physiotherapy (2 years, 120 credits)*
 - Product and Process Development, Production and Logistics (2 years, 120 credits)*
 - Public Health (2 years, 120 credits)*
 - Social Work (2 years, 120 credits)*
 - Software Engineering (1 year, 60 credits)*
 - Software Engineering (2 years, 120 credits)*
 - Sustainable Energy Systems (2 years, 120 credits)*
 - Work Life Studies (2 years, 120 credits)*

EST hosts the International Business Management, International Marketing and the Sustainable Energy Systems programmes.

EST also offers the following additional programme, which is partially taught in English: The engineering programme in Industrial Management (5 year, 300 credits)

- 1000 employees, including 91 chair professors;
- Some 145 international collaborative agreements in 47 countries;
- Turnover (2018) of 990 MSEK (93 million Euro); 32% of which goes to research and graduate education
- External research funding accounts for 60% of the total funding for research and post-graduate (doctoral) education;
- Postgraduate (doctoral) education includes over 215 doctoral students, of whom 70 are external (employed for instance by industry, county council, etc.);
- Postgraduate (doctoral) education is organised into six areas in which the university has been granted degree-awarding powers for research studies: Didactics; Embedded Systems; Environment, Energy and Resource Optimisation; Health and Welfare; Industrial Economics and Organisation (IEO located at DBS) along with Work Life Studies; and Innovation and Product Realisation.

2.5 MDU's Commitments to Ethics, Responsibility and Sustainability (ERS)

2.5.1 A historical engagement with the work environment

MDU has a strong focus on the wellbeing of its employees and their working hours, and on the University's direct environmental impact.

In 1999, the University became the first higher education institution (HEI) in the world to be environmentally certified, and in 2006 it became the first in Sweden to be work environment certified.

Within the organization, MDU conducts preventive work in order to achieve a sustainable work environment in which employees and students experience wellbeing and job satisfaction. The University operates in compliance with the Co-Determination Act, and a safety committee meets regularly. The University provides the conditions for collaboration and participation through workplace meetings and employee interviews. In 2020, a new template for employee interviews was developed with the aim of improving the quality of interviews. The University's employees and students were involved in this task, with adjustments and suggestions for improvements being identified on an ongoing basis at employee interviews and workplace meetings and via the University's reporting system for occupational injuries, incidents and proposals for improvements.

Through its active work for equal conditions and the prevention of harassment and violations, the University is striving to create an equal environment.

In 2020, it obtained international work environment certification standard ISO: 45001, which is issued to protect employees and visitors from work-related accidents and illness.



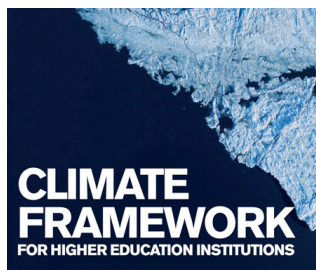
Figure 2: MDU work environment certifications

Eskilstuna new environmentally-classified campus

MDU's new campus in Eskilstuna was completed in January 2020. It was built with both a long-term perspective and sustainability in mind, as evidenced by the fact that a large proportion of the furniture is produced locally and manufactured using sustainable quality materials, the building's energy solution recovers waste heat and has been given a Gold environmental rating, and the building is designed to respond to future digital and flexible study and work environments. About 4,000 students and 300 employees study and work in the 20,000 square metre complex, which consists of three interconnected buildings.



Figure 3: Eskilstuna new University Campus



2.5.2 The Climate Framework

In 2019, 36 Swedish universities and colleges created a combined Climate Framework to serve as the basis for individual climate strategies. This Climate Framework was produced on the initiative of Higher Education Institutions (HEIs) with the ambition of making a decisive contribution to adapting to climate change in line with society's national and international commitments. By 2030, all the HEI signatories of this Climate Framework will have implemented measures so as to be in line with the Paris Agreement's 1.5°C target.

By signing the Climate Framework, MDU undertakes act as follows:

- through education, research and external engagement, to help society as a whole achieve the established targets;
- to work to reduce MDU's own climate impact in line with society's commitment, as expressed in national and international agreements;
- based on MDU's HEI-specific conditions, to set far-reaching targets for climate-related work, allocate resources to achieve these targets and conduct follow-ups; and
- to clearly communicate MDU's climate-related work in order to inspire and spread knowledge to other organizations and members of society.

2.5.3 The AGERA Project

Agenda 2030 and global goals set the framework for a collaboration among Swedish Universities

MDU is one of eight Swedish universities participating in the AGERA Project, which is funded by Vinnova. The aim is to develop our universities' collaborative capacity to strengthen our contributions to Agenda 2030 and fulfil the global goals over the long term. The overall aim is to develop working methods for higher education institutions that, using Agenda 2030 and the global goals as a framework, link internal processes for collaboration with tools for evaluating and following up the effects of collaboration.

During the project period, participating higher education institutions will implement new working methods to monitor and evaluate the impact of collaborative activities on the global goals.

Every university participates in the project with one concrete collaborative activity each.

These activities become case studies to test the so-called SDG Impact Assessment (<https://sdgimpactassessmenttool.org/>) which is a tool for self-assessing how each project/activity contributes to the SDGs and visualizes the outcome.

The results of the test will identify new needs for collaboration to strengthen the positive impact on the global goals. This method is then analysed to see how it can be implemented as part of a university's internal collaboration processes, and what prerequisites are required.

2.5.4 Gender issues

In 2016, Sweden's universities and colleges were commissioned by the government to produce a plan on how each intends to develop their work on gender mainstreaming in order for these activities to contribute towards achieving the gender equality policy goals: for example, in terms of equal opportunities for career paths, gender-based study choices and throughputs. The plan was issued in 2017, and included the development needs, goals and activities the University intended to take up and implement between 2017 and 2019. The plan also described how gender equality would be integrated and become part of the University's regular activities, such as its control procedures. In 2020, a new plan was issued to cover the period between 2020 and 2021.

The objective of MDU's work with gender mainstreaming is to counteract inequality in all areas of the University, and to ensure that both students and staff are provided with the conditions for promoting gender equality in their working lives.

The work being carried out on gender mainstreaming at MDU focuses on three priority areas: the content and form of education, research conditions and equal leadership.

In the area of content and form of education, four educational programmes in different areas have been selected as pilot schemes and revised to ensure that gender and gender perspective are integrated into the education:

Physiotherapy Programme (HVV)

International Business Management (EST) (see table below)

Pre-school Programme (UKK)

Interaction Design (IDT)

Gender perspective in International Business Management Programme.

International business management (IBM) is an English-language business administration programme with a clear international character as regards both its content and the composition of its student and teacher bodies. In 2017, the programme received international accreditation, where what is known as ethics, responsibility and sustainability (ERS) linked to the subject of business economics makes up a significant part of the assessment criteria.

What have we done and what have we learned?

The work with gender mainstreaming has thus been seen as a natural part of considering social, economic and ecological sustainability in all courses on the programme. Among other things, new guidelines were drawn up when existing courses were revised and when designing new courses, to include a requirement that gender equality aspects be pedagogically and substantively tackled in the syllabus and in course supervision. One of the measures adopted was to develop a matrix in which all the teachers responsible for the course assess and fill in a purpose and in-depth study regarding different gender aspects and the way gender equality is affected in the course. It provided a picture of the situation, which also helped to draw attention to the issue, as in some cases and certain courses it had not previously been seen as an important part of the subject. The ambition was to “build in” gender equality issues to the existing course structure and content instead of making them an “additional issue”, the goal being to make them an equally natural component of the courses as more traditional business economics issues. As a result of the attention attracted by #MeToo, discussions on gender equality became an important element of courses in human resources, management and leadership, as well as marketing and advertising, where discussions of gender roles from an international perspective have become a more important part of the content.

What is the next step?

Future development work consists in linking digitalization and gender equality more clearly, as changes in tasks and different professional roles in companies and organizations are predicted to occur in the near future. This will make new demands on change and development work in the business economics area.

These four pilot programmes continued their work in 2020, and also served as role models for a further eleven training programmes. The revised Plan (2020-2021) seeks to contribute to the gender equality policy goal of gender equality education and to integrate the gender equality perspective into the University's programmes, which also creates the conditions for students to counteract inequality themselves in their future working lives. In addition, the University works with the issue of gender equality in its recruitment of future students through targeted communications efforts.

In the area of research conditions, work is under way to pay greater attention to equality between women and men in the distribution of research funds. While MDU does fairly well in terms of gender equality as a whole, there are still differences among the various research areas. This is why the academies have been commissioned to develop action plans for how gender equality is to be taken into account in each research specialism. Research leaders are also given support to help them complete training, participate in workshops and receive support materials on the topic. The work also aims to promote economic equality and the equal distribution of power and influence.

In the area of equal leadership, it is now a requirement that decisions adopted by the Rector and managers should clearly state if, and in what way, the preparation has taken gender aspects into account. In order to make it possible to pay even greater attention to gender equality work, supporting checklists have been designed specifically for the purpose.

During 2020, efforts were made to support the work of the different sections of the action plan. On the intranet, for example, there is a now page where experiences, research, web training and other materials have been collected as a support for gender equality work.

Because the gender equality challenges facing universities are somewhat similar, MDU collaborates closely with other universities in Central Sweden through the “JiHU-mitt” network, an informal group of universities in the region (Högskolan i Gävle, Örebro University, Högskolan Dalarna, Sveriges Lantbruksuniversitet, Linköpings University, Karlstads University and Mälardalens University) with the aim of sharing projects and initiating collaborative activities. For example in 2020, JiHU-mitt universities held a conference on equality in the distribution of research funds and one on equality in decision-making. This year (April 2021), the groups have arranged a conference on equality in educational programmes at MDU.

2.5.4 Disabilities

MDU offers various types of support and assistance so that students with disabilities will be able to study at the University on equal terms with others.

There is special educational support for those who have a permanent disability such as dyslexia, ADHD, or chronic diseases that affect their studies. This support is designed based on their needs, and may, for example, take the form of helping with taking notes, extra time in written exams, a mentor, or recorded course literature.

3. Presentation of EST and DBS

The School of Business, Society and Engineering (EST) is an interdisciplinary unit with education and research, and covers a broad range extending from political science, economics, management and business to engineering. The school was established in 2008.

The PRME report particularly concerns the activities of the Division of Business and Society (DBS) which includes Marketing and Strategy, Accounting, Organization and Management and Economics.

3.1 Education

3.1.1 ERS in educational programmes

Since its foundation, EST has had a specific focus on sustainability and responsibility in both teaching and research, thanks in part to the initiative of committed lecturers and researchers. It is in this context that between 2005 and 2010 different programmes already had a specific focus on business/management and sustainability and on ecological economics:

- Master's programme in Industrial Management with a specialization in Sustainability
- Master's programme in Business Studies with a specialization in Sustainability (MIMA)
- Economics programme with a focus on ecological economics
- Master's of Business Administration programme with a focus on sustainable development and management.

At DBS, PRME involves the following programmes:

- Bachelor's Programme in Business Administration (*Ekonomiprogrammet*: mainly taught in Swedish)
- Bachelor's Programme in International Business Management (taught in English)
- Bachelor's Programme in International Marketing (*Internationella marknadsföringsprogrammet*: taught in Swedish)
- Master's Programme in Business Administration (*Magisterprogrammet I företagsekonomi*: mainly taught in Swedish)
- Master's Programme in International Marketing (taught in English)
- Civil Engineering Programme in Industrial Management (INDEK: taught in Swedish and English)

Recently at EST, and in particular at DBS, new reflections have been initiated on responsible management in education, in accordance with the University's new vision.

Sustainability and ethics are now promoted in all programmes. Generally speaking, there is at least one course in each programme that focuses specifically on different aspects of ERS (most commonly CRS, sustainability in marketing, the circular economy and ethical business), which are explicitly integrated into the learning objectives for the course. In addition, CSR/ERS related issues are present in many courses as case studies or specially tailored seminars.

In the Industrial Engineering Programme, sustainability and ethics issues are then dealt with at the crossroads of management, engineering and citizenship.

An increasing number of students are also willing to focus on ERS issues for their master's and bachelor's theses (see Appendix).

Some examples of ERS related courses (in which ERS can be either the main theme of the course or among the learning objectives):

Business and Society (MBA): Ethical leadership, CSR.

Operational Management Control from a Digital Perspective (MBA): Digitalization and sustainability, sustainable technology, ethics and design.

Contemporary Perspectives on Advanced Management Studies (MBA): Ethics, values and technological sustainability.

Contemporary Issues in Accounting (MBA): Sustainability reporting and accounting. Review of a municipal company's sustainability report.

Sustainability and Industrial Management (Civil Engineering Programme): Relevant dimensions of sustainability and engineers' role in achieving a sustainable future.

Managing a multinational enterprise (IBM): ERS, moral standards and SDGs.

International Marketing (IBM): CRS and ethics as course theme.

Management Accounting (IBM): ERS and sustainability among ILOs.

Business Research Methods (Master's in International Marketing): Training research methods on sustainability-related topics (consumption, digitalization and sustainability, Covid).

As far as methods are concerned, multiple approaches are implemented to encourage ERS into educational programmes, ranging from formal lectures and seminars to the organization of specific events. External actors are regularly invited to take part in lectures and bring issues connected to ERS. Here below are some examples.

In 2020, the CEO of Vafab Miljö, the waste management company of the Metropolitan area of Västerås gave a lecture to first year students of Industrial Management as part of their course of Sustainability. Her lecture focused in particular on valorization processes from waste to energy.

In 2021, in the framework of the course in Contemporary Issues in Consumer Marketing (IM), besides dedicating a block of the course to the issues of Consumer marketing and Circular economy, Consumer marketing and Digitalization, Consumer marketing and Sustainability Goals, a panel of practitioners (entailing IM alumni) was organized to discuss the contemporary issues in consumer behavior and one of which was the topic of ERS. Very well received by the students as well.

How have the sustainable development goals affected the strategy of Multinational enterprises?

1 NO POVERTY	2 ZERO HUNGER	3 GOOD HEALTH AND WELL-BEING	4 QUALITY EDUCATION	5 GENDER EQUALITY	6 CLEAN WATER AND SANITATION
7 AFFORDABLE AND CLEAN ENERGY	8 DECENT WORK AND ECONOMIC GROWTH	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	10 REDUCED INEQUALITIES	11 SUSTAINABLE CITIES AND COMMUNITIES	12 RESPONSIBLE CONSUMPTION AND PRODUCTION
13 CLIMATE ACTION	14 LIFE BELOW WATER	15 LIFE ON LAND	16 PEACE, JUSTICE AND STRONG INSTITUTIONS	17 PARTNERSHIPS FOR THE GOALS	SUSTAINABLE DEVELOPMENT GOALS

From your point of view, do Multinational Enterprises act in a proactive manner or reactive one?

Figure 4: Presentation from a practitioners panel, Course in Contemporary Issues in Consumer Marketing

Another example concerns the course Managing the Multinational Enterprise (IBM) where besides lectures on ERS, a panel discussion was organized with one academic and 3 alumni on the topic of Responsibility within Multinational enterprises. Very popular and interesting format for students.

Panel on Responsibility within Multinational Enterprises

11/02/2021
Moderators: Noushan Memar & Charlotta Edlund
Course: Managing the Multinational Enterprise

Our Panelists

Academic panelist:

- Associate Professor Peter Ekman
 - Mälardalen University

Corporate representatives:

- Dennis Tran
 - Operations Manager at AstraZeneca
 - Alumnus of "International business management" bachelor programme class of 2016
- Glenn Donnestenn
 - Global Sales Leader at IKEA
 - Alumnus of "International business management" bachelor programme class of 2016
- Lauri Erik Lehikoinen
 - Senior Vice president of global sales at Logmore
 - Alumnus of "International business management" bachelor programme class of 2017

Figure 5: Presentation from a practitioners panel, Course in Managing the Multinational Enterprise

Students are also invited to events MDU organizes with local partners, for example, in 2020, *Tillväxt motor* (“The Growth Engine”, an interface between MDU and local companies) organized a workshop on “Women in Industry” with the intention of gathering together women’s experiences in management positions.

Last but not least, Sustainability Day is one of the most popular examples on how MDU encourages ERS in adution (see next section).

3.1.2 Sustainability Day

On 17 November 2020, EST arranged the Sustainability Day for the third time for all the academy’s first-year students.

The Sustainability Day is organized as a one-full-day event at which lecturers and researchers from the Energy Department and Social Science Departments give lectures and interactive seminars on a broad range of different topics connected to ERS.

External keynote speakers from both business and academia are invited to discuss up-to-date issues from their areas of activity.

Attendance at the Sustainability Day is mandatory for EST’s approximately 900 first-year students. In 2020, due to the pandemic, Sustainability Day was held digitally. As the academy has both national and international students, EST arranges two parallel programmes – one in Swedish and one in English. The day includes lectures from both partners and EST’s own teachers, as well as workshops and quizzes on sustainability.

The purpose of Sustainability Day is to increase awareness among the university’s first-year students of matters concerning responsibility, sustainability and ethics. This has had an impact on the number of essays and dissertations on the theme of sustainability, which is increasing: more people have chosen to delve into issues around sustainability, responsibility and ethics over the past two years, says Charlotta Edlund, Programme Coordinator International Business Management.

The plan for 2020 was to arrange a Sustainability Day for the entire MDU, but this had to be postponed until 2021 due to the pandemic.

Sustainability Day November 17th, 2020

09.15-09.30	Welcome by Lena Gumaelius - Pro Vice Chancellor Mdh
09.30-10.10	Ronja Lidénhammar – IBM Alumnus living in New Zealand Sustainability Trends and Challenges for Businesses
10.15-10.45	Coffee break
10.50-11.30	Emma Nerenheim - Chief Environmental Officer at Northvolt
11.30-12.30	Lunch
12.45-13.30	Magnus Hoppe & Kamran Namdar - The Transformative Entrepreneurial Self - How do we design an Education worth living for? (ALL students)
13.40-15.10	Silvia Bruzzone - Urban sustainability – multiple understandings and challenges (International Business Management)
13.40-15.10	Eva Thorin, Eva Nordlander, Ida Sylwan – Sustainability Quiz (Master International)
Hållbarhetsdagen 17:e November, 2020	
09.45-10.00	Välkomna Lena Gumaelius – Pro-Rektor Mdh
10.00-10.40	Sara Paulsson – Miljödirektör Länsstyrelsen Västmanland Läget i länet
10.40-11.00	Kafferaft
11.00-11.40	Sophie Andersson - Hållbarhetschef Region Västmanland Hållbarhet – varför bry sig?
11.40-12.30	Lunch
12.45-13.30	Magnus Berglind - Din Agenda 2030 (ALLA studenter)
13.40-16.00	Carl-Fredrik Zetterman – IdéLab – Workshop: Nyfiken på att hjälpa en startup som försöker lösa utmaningar kring matsvinn? (Internationella marknadsföringsprogrammet)
13.40-15.10	Stefan Ohman – Sparbanken Rekarne – Projektledning och Verksamhetsutveckling för Hållbara Finanser (Magisterprogrammet i Företags ekonomi)
13.40-14.30	Pär Blomqvist – Hållbar Infrastruktur? Klimatkrisens utmaningar på våra viktigaste system (Civilingenjör Industriell Ekonomi)
13.40-14.30	Evelina Hedlund – Hållbar juridik för privatpersoner med konsumentfokus (Ekonomprogrammet)



Figure 6: Sustainability Day (2020) Programme

Globally Responsible Leadership Initiative (GRLI)

As part of the Globally Responsible Leadership Initiative (GRLI), an EFMD, AACSB International and UN Global Compact strategic partnership inclusive of the PRME, the Deans & Directors Cohort (now in its fourth year) is a network of Deans, Directors and institutions engaged in developing collaborations to promote transformative change towards more sustainable transition in education. The group was formed in 2017, and meets once a year.

Among the aims of the network are:

- to collaborate with other committed change agents in a facilitated global process of co-learning and co-creation;
- to develop a deeper understanding of the vision of management education for the world;
- to define and initiate a transformative change outcome or programme for an organization;

- to identify and share tools and methodologies to facilitate further exploration and implementation of global responsibility within an organization;
- to share the cohort's collective learning across leading networks and on global platforms as a bold call to action for educators and the industry worldwide;
- to be recognized as leaders taking charge of and acting on issues of key importance for the future of management education; and
- to impact the development of higher and management education globally.

The Dean of EST is a participant in this network and its initiatives, one of which is ongoing and consists in a collective effort to organizing an online course on ERS issues. The idea is that each university should propose and valorize its own competences in regards to global responsibility and offer it as part of the course programme.

3.1.3 “Student influence”

The so called “student influence” is an important part of the University’s work to ensure the quality of all education from a student perspective. In undergraduate and advanced level education, student influence is exercised partly through student delegates who are appointed by the student union to represent students in the University’s preparatory and decision-making bodies, and partly by evaluating all courses and programmes at an undergraduate and advanced level through students participation in course and programme evaluations.

The co-operation agreement between MDU and the student union governs both parties’ commitments to student influence. The students’ union has the task of conducting an ongoing dialogue with the University on how student influence works and also to review whether there is a need for development. In 2020, the University and the students’ union strengthened their collaboration to promote student influence.

The University’s student ombudsman is an impartial figure at the University to whom students can address their views and comments on the University’s implementation of its education programmes.

Student influence at a doctoral level includes an opportunity for doctoral students to exercise influence over the University’s activities. This is exercised by student representatives who are appointed by the students’ union to represent the doctoral students in the University’s decision-making and preparatory bodies with regard to postgraduate education. Student influence is also applied through postgraduate level courses being evaluated by means of doctoral students’ participation in course evaluations.

There is also a Doctoral Student Council at the University that guarantees these students’ interests in the doctoral programme. The Doctoral Student Council works to ensure that the education provided is of good quality, and it is the voice of doctoral students within the University. The Council is made up of representatives from the doctoral student group and is responsible for student influence in the doctoral programme and for monitoring the interests of doctoral students as a group and as individuals.

There is also a doctoral student ombudsman to whom doctoral students can turn if they feel they have been improperly or badly treated. In the event of difficulties in the collaboration between the University and individual doctoral students, for example, the Doctoral Student Council can provide advice and guidance.

Students engagement.

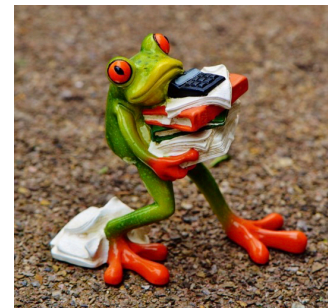
Primeathon 2021. Sustainable Office and Modern Workplaces of the Future

Hackathons have become an increasingly popular way of finding new solutions to problems, while also team-building over a short span of time. Students come together to create, pitch and compete with their original ideas.

In April 2020, students from the International Business Management Programme took part in a Hackathon with students from the US, Latvia and Czech Republic.

The project theme for the 2020 Primeathon Hackathon was Sustainable Office and Modern Workplaces of the Future. With the increased need to find sustainable solutions, both social and economic, office space and the workplace are areas where we will likely see a major transformation over the next ten years or so. Many countries are striving to create dynamic, knowledge-based economies, and although we are well on the way to achieving this, people still work in offices and workplaces that were designed decades ago and are often both inefficient and unsustainable.

The objective of the project is therefore to identify and suggest a potential efficient, sustainable and productive office and workplace. Four groups, each comprising students from the four participating universities, were given the idea and had twenty-four hours to deliver a solution in writing and presenting their solutions orally.



Hackathons bring together a unique mix of students who give their time to create something exceptional. Students learn skills such as working in a team, idea generation, project planning, report writing and presentation techniques.

In 2020, four universities (MDU, Texas State University, Austin, Brno University of Technology (Czech Republic) and Banku Augstskola (Latvia) were involved, with seventeen students and seven mentors taking part.

The 2021 event saw an expansion of approximately 300%, with twelve partners (from eleven countries) and sixty-three students participating. The event took place over the course of twenty-four hours between 15 and 16 April (www.primeathon.com).

Partner 2021
Mälardalen University, Sweden
Banku Augstskola, Latvia
Texas State University, USA
Brno University of Technology, Czech Republic
Universitat de Girona, Spain
FH Joanneum, Austria
Hanze University of Applied Sciences Groningen, NL
Molloy College, USA
Universidade de Ibaguè, Colombia
TH Brandenburg, Germany
University of Economics in Katowice
International Hellenic University, Greece

Figure 7: Partners of the 2021 Edition of Primeathon

"The Hackathon was truly amazing. I am so happy I could participate. It was a great experience for me. Meeting new people, figuring out how to cooperate together, defining our project scope, working it out together and finally presenting our outcomes. This all and even more just in 24 hours! I take tons of lessons learned both from my colleagues and lecturers who were giving us their feedbacks along the way. Some moments were tough, very tough, but at the end, I remember them as good times. If you search for "life-hacks" to learn, experience and enjoy a lot in a very short time Hackathon is a perfect way you. Three words I take with me: Team spirit, Determination, Experience." /Ondřej Šesták - Brno University of Technology, Czech Republic

"It was a well put together event. Thank you for this opportunity and this new experience. I thought this was a great use of 24 hours. At first I was skeptical but then really got into the event. Thank you so much! It was fun. I could possibly help in the future! Just keep me in reserve!" /Calvin Miller - Master Student at Texas State University, USA

"I will gladly encourage students to participate! Thanks again for letting me be part of the Hackathon project, it was a very nice experience and I had a good time while doing it. If you need me as a 'Hackathon mentor' don't hesitate to contact me." /Ayelen Rojas Alvarez - Mälardalen University, Sweden

Future goals in education:

- to continue ensuring that all Swedish- and English-language business programmes have ERS issues integrated into their course curricula;
- to continue to host annual events and invite business students to a business ethics day with recognized speakers on ERS;
- to strengthen the teaching skills base for the business programmes in the area of ethics, responsibility and sustainability by taking these aspects into account when recruiting new faculty members; and
- to strengthen collaborations with other universities in order to share and develop methods for integrating ERS into our educational programme.

3.2 IEO Research tracks

The Industrial Economics and Organization (IEO) is one of the two research units at EST (the other being the Future Energy Centre, part of the Energy Department) and corresponds approximately to researchers from DBS.

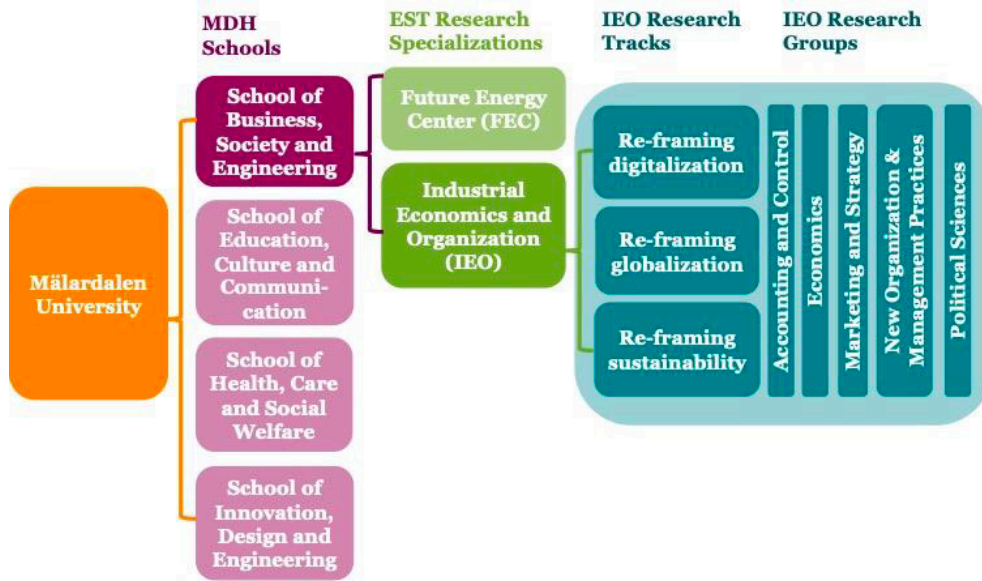


Figure 8. IEO research tracks and research groups in relation to MDU organization.

In 2020, it was decided to provide research with a more stable and formal organization in order to develop improved synergies among researchers and to increase the University’s attractiveness to external partners. Research at IEO is now organized into three main research groups: re-framing sustainability, re-framing digitalization and re-framing globalization.

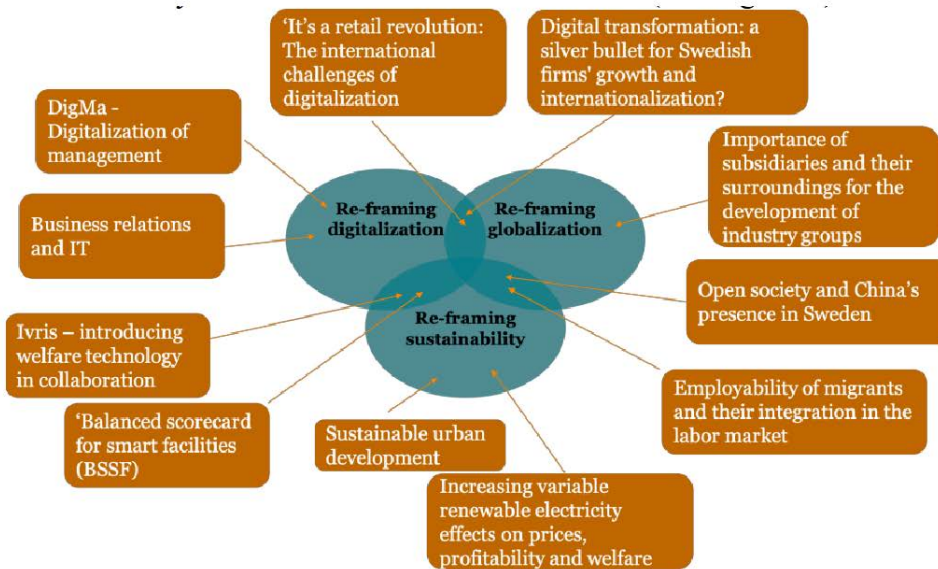


Figure 9. Examples of projects relating to the three research tracks at IEO.

3.2.1 Re-framing digitalization

Re-framing digitalization studies digital transformation as an organizational, business and societal change process rather than as a question of technology implementation. Researchers in this track also raise critical questions regarding the consequences of the use of digital technologies for both organizations and society. To this end, different approaches are mobilized, from those that view digitalization as a new phenomenon that can be studied in the same way as other kinds of innovations to those that see digitalization as a new phenomenon with specific characteristics. The research track includes many externally-funded projects in which researchers collaborate with private and public organizations such as ABB and the Municipalities of Västerås and Eskilstuna. Examples include a six-year Forte-funded research programme in collaboration with Anglia Ruskin University, UK (DigMa), and the Sörmlandskontraktet, which is funded by Eskilstuna Municipality. The results include both theoretical contributions and practical insights and tools. The strengths the track can build on are: a) the volume of external funding, along with close collaboration with external actors, which enables research activities to be carried out; and b) recognized, competent and engaged researchers active in important arenas for advancing research on digitalization (management of the national doctoral school, Management and IT, organization of conference tracks, editing of books, etc.). The challenges ahead are: a) to find a good balance in the time dedicated to making an impact on the academic audience through highly-ranked journals, contributing to relevant conversations in specific journals and working locally with collaborating organizations; and b) to increase collaboration internally in a productive manner.

3.2.2 Re-framing globalization

Re-framing globalization studies the cross-border nature of social phenomena, with a particular emphasis on multinational companies with operations in different countries and small- to medium-sized companies active in international arenas, and the challenges they meet. However, globalization – that is, the increased connectivity of human activity around the world – is also a defining characteristic of the modern world, and thus a central phenomenon for all societal actors, as well as those who restrict their activities to a purely domestic level. The research thus provides valuable insights into societal actors at the macro (nations), meso (firms) and micro (individuals) levels. Research is conducted by numerous academic collaborations and published in internationally recognized journals and widely cited. According to a recently published study in the *Journal of International Business Studies*, for example, Professor Ulf Andersson ranks among the key contributors to subsidiary research. The results are also used by associations and companies, such as Business Sweden's Business Climate Survey 2020. Strengths that the track can build on are: a) the strong cohesion provided by most researchers working with similar, but complementary, theoretical foundations in international management and international business; and b) internationally recognized high-quality research manifested through many publications in highly-ranked journals and strong academic networks. The challenges facing the track are: a) that at the moment, there are only a few externally funded projects led by MDU; and b) the relatively scarce long-term co-production with regional and public and private sector organizations.

3.2.3 Re-framing sustainability

The re-framing sustainability research track focuses on the critical issues to be dealt with in order to work towards long-term solutions rather than short-term equilibria by building on knowledge developed in different disciplines. The research thus aims to bring theories and practices associated with social, economic and ecological sustainability together and re-frame them so that they can be put to use in the reconstruction and rethinking of how to create prosperous and responsible neighbourhoods and organizations and achieve long-lasting wellbeing for customers and citizens. This raises important, and sometimes conflicting, political and economic questions about rights, needs, equality, boundaries, values, profit and the optimal allocation of limited resources. Synergies between research, education and cooperation with societal actors are also particularly valuable in this regard, and are a well-developed area of the University's activities.

In cross-sector collaborations, the University is often involved in projects with the local public administration, local government and organizations such as housing companies, NGOs and civic organizations.

The re-framing sustainability research track thus contributes to future business, management and society by supporting the shift from "business as usual" to "business for critical futures" led by responsible management practices that are applied in a continuum between the local and the global, and the social and the technological, and grounded in a situated commitment to society.

The collective work within the re-framing sustainability track is organized around three different areas which are presented below, together with example of ongoing projects.

1/ **Smart cities and urban infrastructures** focuses on the challenges of sustainable development in urban economies.

Balanced Scorecard for Smart Facilities (BSSF)

The aim of this project is to develop a method for energy- and resource-efficient real estate companies in the form of so-called “balanced scorecards”, which is a system and regulating philosophy for the governance of organizations and companies. A balanced scorecard must take into account environmental, economic and social sustainability by: a) identifying decisive factors in investment decisions for innovations; and b) identifying the characteristics of tenants who wish to adopt a sustainable business logic and thereby engage in and increase their organization’s knowledge. The project has a high-energy relevance because an integration of sustainability aspects into the management of property companies can lead to increased investments in, for example, energy efficiency.

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Peter Ekman

Future-Proof Cities

Future-Proof Cities is a business research school and doctoral programme that focuses on sustainable urban development and is based on a societal dialogue on the challenges facing medium-sized Swedish cities – a dialogue that has academic collaborations with business and community planning to implement solutions for sustainable development at its heart. It is a collaboration with the business community and the Universities of Dalarna and Mälardalen. It is planned that doctoral students, who are at the centre of this collaboration, will be employed in the business world, while the research supervisors belong to the relevant higher education institutions. In the “Future-Proof Cities” business research school, three higher education institutions are now joining together in a unique initiative, using their professional knowledge of urban development to develop cities into climate-smart, vibrant, healthy and safe places. <https://www.hig.se/futureproofcities>

Contact person: Eva Thorin eva.thorin@mdh.se



Eva Thorin

2/ **Democracy and inclusion** investigates fundamental democratic questions such as the inclusiveness of migrants and climate migration, the changing roles of citizens and citizenship and the interconnections between global warming and justice.

Skilled Migrants and their career in Sweden: Study of institutional, organizational and individual factors

The incorporation of skilled migrants into the job market is a critical contemporary issue in Sweden. The rate of unemployment and under-employment (being employed inadequately with respect to the skill level) is higher among foreign-born residents. The employment gap cannot be explained totally by the human capital and demographics of migrants. We therefore seek to: a) identify the significant individual, organizational and institutional factors influencing migrants’ career success; and b) develop a multi-level framework that presents a comprehensive picture of the interaction of the factors and their effect on the career success of skilled migrants. The role of organizational processes and strategies regarding migrants is the focal point, as the study of organizational factors constitutes a gap in the research, and organization is the place where the labour supply side (skilled migrants with their human capital) meets the demand side (career opportunities) and interaction occurs.

Using a mixed method design, we start by collecting and analysing qualitative data from skilled migrants, business managers, recruiters and experts in migration-related authorities. Then, based on the initial qualitative findings, we conduct the second quantitative phase, which surveys employed skilled migrants and their managers in more than 15 municipalities across Sweden. In total, 600 skilled migrants and 300 managers will be surveyed. The multi-level framework of the career success of skilled migrants, the main outcome, can be a foundation for further research and assist migrants, organizations and authorities with formulating better strategies and policies for career success

Contact person: ali.farashah@mdh.se



Ali Farashah

A typology of residents’ notions of housing construction in different districts of Västerås

The objective of the project is to identify the conditions for the construction of a socially sustainable district (Sättra) in Västerås. Among other things, this means that we must know what the potential housing will be like and what the requirements are for forms of housing and tenancy, as well as the physical and social environment. A key issue that is addressed is the degree of acceptance of mixing different social groups in the new district. The project aims to engage the residents in two different types of neighbourhood to anchor their knowledge and experience in urban planning, publish results from the two surveys and contribute in a broad sense to sustainable societal development in Sweden. In order to achieve these goals, the researchers will, among other things, develop new digital methods for engaging residents to participate in the surveys. The researchers will also collaborate with the City of Västerås’ community planners on an ongoing basis.

Contact person: Terence Fell terence.fell@mdh.se



Terence Fell

3/ **Inclusive health/care and technology for social sustainability** at the intersection with digitalization in relation to welfare technologies and the re-construction of care practices.



Lucia Crevani

Introducing welfare technologies through realizing collaborative innovation (IVRIS)

The increased use of welfare technology is often seen as a way of solving the challenge of an increasingly ageing population. However, the introduction of welfare technology is a complex process that requires the involvement of users, the elderly and various professional and organizational groups that have an impact on how technology is presented, introduced, used, controlled and followed up. The purpose of the project is to enable the use and integration of knowledge, methods and tools (a platform) developed in the Vinnova funded SInS project on innovation capacity cooperating towards the introduction of welfare technologies. In the short term, the aim is to enable the use and integration of the platform in two selected organizations, Eskilstuna Municipality and Hjälpmedelcentralen in Eskilstuna. In the long term, thanks to FoU i Sörmland, the objective is that this way of working will also have spread to other organizations in the region.

Funder: Vinnova. Contact person: Lucia Crevani lucia.crevani@mdh.se

Future research goals:

- to continue relating research to issues of ethics, responsibility and sustainability in its involvement and cooperation with companies and municipalities;
- to implement ERS even further in an ongoing effort to link international academic research, business practice and society in the promotion of sustainable enterprises and communities; and
- to strengthen the research competence base within the area of ethics, responsibility and sustainability by taking these aspects into account when recruiting new faculty members.

4. Partnerships and Dialogues

4.1 The corporate advisory board

MDU has had collaborations with business and the public sector for many years. These can be about anything from research projects to degree projects and internships. By concluding agreements at a strategic level, the University builds a platform for long-term collaborations that benefit all parties.

The Corporate Advisory Board (CAB) is a consulting and supporting entity, consisting of members of regional public organizations and industries. It plays an important role of advice in the development and assessment of our courses in the business and management education programmes in terms of practical relevance, quality and future organizational demands. The CAB has a strong profile regarding CSR and sustainability in their respective business areas. The goal for EST/DBS is to enhance the integration of business practices in relation to programmes and courses. At the same time it has to ensure the independent critical stance of the University in relation to economic, social and environmental development.

Maria Ekström	Volvo CE
Eva Lilja	Västerås stad
Gunilla Lidgren	Riksbyggen
Ove Fredriksson	MälarEnergi
Viktoria Melander	Bombardier Transportation Sweden AB
Katarina Hillman	ICA Sverige AB
Pia Järnkvist	Eskilstuna kommun
Marcus Conrad	Sparbanken Rekarne
Hanna Edberg-Flodin	Sandvik AB
Maria Österberg	Region Västmanland
Marie Christensson	VL (Region Västmanland)
Veronica Bohlin	Randstad
Erik Björck	Hitachi

Figure 10: Members of MDU Corporate Advisory Board

4.2 Research collaboration platforms

MDU has strategic collaboration agreements with the following organizations: ABB, Bombardier, Eskilstuna Energi & Miljö, Eskilstuna Municipality, Mälarenergi, Region Sörmland, Region Västmanland, VafabMiljö, Volvo Construction Equipment, Sparbanken Rekarne and the City of Västerås.

In the following section, we present some of the collaborative platforms that MDU has established:

The Social Contract (Samhällskontraktet) is a collaboration platform on research and development involving MDU, Eskilstuna Municipality, the City of Västerås, Region Sörmland and Region Västmanland work closely together on research and development. It is one of the most comprehensive collaboration agreements in Sweden when it comes to agreements between public actors and universities. The areas of the social contract are:

- The working life of the future (FA): how municipalities and county councils should act and work to be attractive employers in the future labour market.
- Sustainable social development (HS): The partners work together to formulate problems and co-produce knowledge. The problems may have technical, environmental, economic, social and organizational aspects.
- Mälardalen's competence centre for health and welfare (MKHV) is a collaborative organization tasked with supporting the parties' competence development.
- Mälardalen's competence centre for learning (MKL) conducts research and development activities at the intersection of the MKHV parties' activities with a focus on development-oriented learning. <https://www.mdh.se/samverkan/plattformar/samhällskontraktet>

Automation Region is a centre of excellence at Mälardalen University that unites small enterprises, large corporations, academia and the public sector in order to work on common intersectoral and interdisciplinary projects.

Together with 150 member organizations, AR strives to market Swedish automation expertise, stimulate innovations and secure the industry's long-term skills provision.

Automation Region is financed by funds from the EU, the Swedish Agency for Economic and Regional Growth, Vinnova and various regional actors. In 2016, Automation Region was named one of three winners of Vinnväxt, a Vinnova programme that provides ten years' funding for the development of innovative environments. <https://www.automationregion.com/en/home/>

Robotdalen was established as a training centre at Mälardalen University and still partly belongs to Mälardalen University, but since 2019 it has also had a parallel entity, Robotdalen AB, which is owned by Robotdalen Association, whose four members are Västerås City, Eskilstuna Municipality, Region Västmanland and Region Sörmland.

Robotdalen focuses on health and welfare – mainly through welfare technologies – and industry. It contributes to solving these challenges by developing, commercializing and implementing new products and solutions. <https://en.robotdalen.se/>

Mälardalen Industrial Technology Centre (MITC) was established in 2011 after the manufacturing industries of the Mälardalen Region expressed a desire to do more structured and long-term work focused on competence development and academic collaboration. A collaboration platform was set up with Mälardalen University as the competence base and a limited company, MITC AB, owned by the region's main industrial companies, as the performing entity. Today, approximately 20 people from the University and industry are actively involved in MITCs operations. In 2019, MITC established a Technology Centre in Eskilstuna, which will further strengthen MITC as a catalyst for industrial renewal and change. <https://mitc.se/en>

“The growth engine” (Tillväxtmotor) is an initiative of MDU established to provide support for SMEs in their development. It invites business leaders, recognized experts in business development and MDU, organizing a multiplicity of programmes and activities to support business growth. <https://www.mdh.se/samverkan/plattformar/tillvaxtmotorn-for-sma-och-medelstora-foretag>



The Sörmland Contract is a collaboration between Eskilstuna Municipality, Eskilstuna Fabriksförening and MDU that contributes towards giving MDU in Eskilstuna a unique educational offer linked to digitization and IT. The Sörmland contract has contributed to providing attractive and relevant education based on the needs of the labour market. This includes a close collaboration with business and the public sector. Eskilstuna and Sörmland are attractive locations where companies and students are motivated to remain and develop.




Idélab offers students, researchers and other employees of Mälardalen University advice on the development of ideas and business and personal development, completely free of charge. Idélab was founded in 1999 and has solid experience in idea and business development. Since it was created in the late 1990s, over 600 companies have been started by individuals who have taken part in Idélab's process. Idélab's purpose is to utilize ideas and to enable ideas and results from research to be utilized. It also works to promote entrepreneurship and a culture of innovation throughout MDU. <https://www.mdh.se/student/jobb-och-framtid/idelab>

5. How MDU Works with the UN SDGs

This is how MDU works with the sustainable development goals



	
<ul style="list-style-type: none"> • A typology of residents' conceptions of housing in different Västerås' neighbourhood • AI for Sustainable Food Production from Farm to Fork • Enhancing transition practices in early childhood education • FlexiHealth: flexible softwarized networks for digital healthcare • HV3D Assistive technology and welfare technology in 3 dimensions • IHR intensive home rehabilitation • NURED Nurse education Development - homecare • Participation in everyday life for adults with profound intellectual disability • IVRIS Introducing welfare technology through the realization of collaborative innovation capacity • The situation for family caregivers to patients with heart failure and their importance in heart failure nursing • Young women's perspectives of mental health • Working from home under the Covid-19 pandemic and psychosocial wellbeing <p>Collaboration Västerås municipality Eskilstuna municipality SweGreen AB RISE Research Institutes of Sweden FOU Sörmland Region Västmanland</p>	<ul style="list-style-type: none"> • Enhancing transition practices in early childhood education • Following footprints of resilient youth: successful educational trajectories and transition into higher education • Future curriculum resources in mathematics • Future factories in the Cloud • Social language environment – development and conditions for children and multilingual children's literacy processes in Swedish preschools • Teachers' use of mathematics curriculum resources in the 21:st century: a cross-cultural project • Working systematically with education for sustainability - experiences from swedish I Ur and Skur preschools <p>Collaboration Eskilstuna municipality Gnesta municipality Hallstahammars municipality Regionförbundet Sörmland Region Västmanland Sparbanken Rekarne Stockholms University Västerås municipality Örebro municipality</p>

<p>5 GENDER EQUALITY</p> 		<p>7 AFFORDABLE AND CLEAN ENERGY</p> 	
<ul style="list-style-type: none"> • Norm creative interior for play and learning in preschools • TransMission • Network for work-oriented care research • What is Zero- tolerance in practice? <p>Collaboration Västerås City Lycklig arkitektur AB Umeå university Karolinska Institutet</p>		<ul style="list-style-type: none"> • A Gridded Water-Food-Energy Nexus Management System for Sweden • BBChina – A master course devoted to the whole bioenergy and biochemicals chain • BREEMRES – Building a Research and Education Environment for Modern Renewable Energy Systems • Digitalization of HVDC grids by means of smart data discovery • Evaluation of self-consumption of PV electricity in Sweden • FREE – Feasibility of Renewable Energy Integrated with Energy Storage in Buildings • GREENER: Intelligent energy management in connected construction sites • MAGNITUDE – Bringing flexibility provided by multi energy carrier integration to a new magnitude • PolyPO – Polygeneration and Process Optimization for Advanced Combined Heat and Power Plants • SMART – Smart control of district heating networks integrating next generation energy-efficient buildings <p>Collaboration ABB Mälarenergi Bombardier Westinghouse Vafab miljö Eskilstuna energi och miljö KK-stiftelsen Castellum Aspholmen</p>	
<p>13 CLIMATE ACTION</p> 		<p>17 PARTNERSHIPS FOR THE GOALS</p> 	
<ul style="list-style-type: none"> • Aggregate Farming in the Cloud • AIFood • AI for Sustainable Food Production from Farm to Fork • Evaluation of the first agrivoltaic system in Sweden • FUDIPO – Future Directions for Process industry Optimization • iREST – Integrating renewable energies and storage technologies into residential, office and industry buildings: towards near zero energy targets • NET-RAPIDO: Negative emission technologies: readiness assessment, policy instrument design, options for governance and dialogue • Towards An Optimal Irrigation Management System from the Water-Food-Energy Nexus Perspective • TRADE – Turbo electRiC Aircraft Design Environment <p>Collaboration ABB Bombardier Mälarenergi Westinghouse Vafab miljö Eskilstuna energi och miljö KK-stiftelsen Castellum Aspholmen</p>		<ul style="list-style-type: none"> • A typology of residents' conceptions of housing in different Västerås' neighbourhood • BBChina – A master course devoted to the whole bioenergy and biochemicals chain • Digitized management – what can we learn from England and Sweden? • Energy management of fuel cell powered data centers • Enhancing transition practices in early childhood education • FUSION (Featured eUrope and South asla mObility Network) • HV3D Assistive technology and welfare technology in 3 dimensions • IVRIS Introducing welfare technology through the realization of collaborative innovation capacity <p>Collaboration Sörmland County Council Västmanland County Council Eskilstuna municipality Västerås municipality</p>	

Appendix

Appendix A. PRME - Relevant PhD thesis

PHD in Business Administration	
Title	Semester
Business relations in the Swedish electricity market	Spring 2020

Appendix B. PRME – Relevant Master’s Thesis

Theses in Business Administration	
Title	Semester
Sport – A Societal tool for sustainability	Spring 2020
Digitalization in Swedish municipalities – A qualitative study on post bureaucratic development in public organizations	Spring 2020
Tales of Foresight – A Qualitative study of Narratives about Futurists working methods	Spring 2020
Social sustainability – What is it? A Qualitative study on social sustainability in an public organization	Spring 2020
IS AI THE KEY TO AN EQUIVALENT RECRUITMENT? – A qualitative study on how artificial intelligence impacts discrimination and prejudice during the recruitment process	Spring 2020
FROM FAST TO SLOW: CAN INFLUENCERS MAKE US SHOP MORE SUSTAINABLY? A quantitative study investigating the impact of influencers and their communities on fashion purchase intent and circular behavior	Spring 2020
Keen to be green? Consumer perceptions of green advertising in the skincare industry	Spring 2020
Can CSR and Slow fashion Influence Purchase Intent? A quantitative study investigating factors that affect consumers' behavioral: intentions towards buying fashion online	Spring 2020
The impact of Corporate Social Responsibility on Brand Equity in the cosmetic industry	Spring 2019
Factors affecting green product purchase intention : A comparative study of generation Z and generation Y	Spring 2019

Appendix C. PRME – Relevant Bachelor’s Thesis

Theses in Business Administration	
Title	Semester
Green purchase intention during a crisis - A quantitative study on consumers living in Sweden during the Covid-19 crisis	Fall 2020
Is there talk about sustainability? A qualitative study of how food companies communicate their sustainability work through green marketing	Fall 2020
The association between CSR and Financial Performance - A study on the major Swedish-owned banks	Fall 2020
SAVE THE WORLD BUT HAVE FUN ON THE WAY; A study about the driving forces that motivate or hinder the purchase of electric vehicles	Spring 2020
CSR: S påverkan på svenska rökarens attityder och köpbeteende / CSR's impact on Swedish smoker's attitude and purchasing behavior	Spring 2020
Moisturize ecologically? A qualitative study on young women's consumer behavior around ecological skincare products	Spring 2020
CSR - Marknadsföring inom anläggningsmaskinbranschen / CSR – marketing within the heavy machinery industry	Spring 2020
How is consumer-based brand equity affected by sustainability marketing?	Spring 2020
What attracts a green customer? - A quantitative study of how consumers are affected by positive and negative aspects of green marketing	Spring 2020
The impact of sustainability reporting on profitability	Spring 2020
Why filthy rich? – A quantitative study on the relationship between tax aggressiveness and CSR among large Swedish companies in the construction industry	Spring 2020
Sustainability reporting in three industries: A comparative content analysis of nine Swedish firms' sustainability reports	Spring 2020
From then till now - A study of changes in sustainability reports from 1998-2019	Spring 2020
Are women the secret ingredient for good sustainability reports? - A quantitative study about the relationship between the number of women on boards and the amount of sustainability reporting	Spring 2020
Sustainable supply chains? A qualitative study of how big retail corporations work to develop a sustainable supply chain	Spring 2020
A transformed leadership - A study of how a modernization of the financial control has affected the leadership of managers with financial responsibility	Spring 2020
Female managers voices in the energy industry - A study of women's experiences of barriers in their roles as managers	Spring 2020
Environmental protection as a driver for employee satisfaction and retention - A quantitative study on the Swedish cosmetics industry	Spring 2020

How digitalization reconfigures organizational practices in the banking sector	Spring 2020
Investigating the 'Greenness' of Young Consumers - A Study on the Influence of Environmental Concern, Exposure to Green Marketing and Green Scepticism on Green Purchase Decisions	Spring 2020
Corporate Social Responsibility and its Effect on Employee Retention Intention	Spring 2020
Diversity: Embrace it, Share it, Celebrate it. A study of employees' perspectives on the CSR initiatives for a diverse workforce and an inclusive work environment	Spring 2020
Exploration of the COVID-19 pandemic in relation to the healthcare industry Supply Chain	Spring 2020
CONSUMER BEHAVIOUR TOWARDS THE PURCHASE AND USAGE OF ELECTRIC VEHICLES BY SWEDISH MILLINNEALS	Spring 2020
Return It Or Not? How Informed E-Commerce Customers Are In Relation To Environmental Effects Of E-Purchase Returns?	Spring 2020
"Eventually I got so pissed off that he wasn't allowed to participate". A qualitative study about female and male leadership in the manufacturing business	Fall 2019
Consumers' attitudes towards CSR – A study on how consumers' attitudes towards companies taking a stand in gender equality issues affect their purchase intention	Fall 2019
Sustainability as Leading Factor for Competitive Advantage	Fall 2019
Relevance of stakeholders in banks' sustainability reporting - A qualitative study at Nordea, SEB, Ekobanken, Danske Bank & Sparbanken Rekarne	Spring 2019
Sustainability reporting in the public sector – A comparative study of environmental issues in Swedish municipalities	Spring 2019
Listed companies' environmental responsibility and commitments - A comparative study on Sweden's six largest listed companies and their way of presenting sustainability with focus on the environment	Spring 2019
Are there logical explanations, or is it just a reluctance for changes? - A qualitative study on women's underrepresentation as a partner in the auditing industry	Spring 2019
Earnings management based on the CEO's age – Is there a connection?	Spring 2019
Corporate Social Responsibility – A qualitative study about how three companies successfully use CSR to strengthen their brand	Spring 2019
Sustainability reporting in steel industry companies operating in Sweden - How has the law on sustainability reporting changed the sustainability reports?	Spring 2019
"Circular economy - a qualitative study regarding challenges of Swedish small businesses	Spring 2019
Soft pieces of Human Capital -A case inspired study about education, competence and health	Spring 2019
Corporate social responsibility and managing	Spring 2019
Greenwashing, can they fool you? A qualitative study if consumers are aware of Greenwashing and how the attitude is towards the strategy	Spring 2019
How corporate social responsibility affects young consumers' purchase behavior	Spring 2019
CSR's impact on consumer purchasing behavior- A quantitative study on how CSR affect Swedish consumers' buying behavior of e-commerce clothing	Spring 2019
The power of green	Spring 2019
Corporate Social Responsibility: In Words or Deeds?	Spring 2019
Appropriate Approach or Apparent Appeasement: A study in external stakeholder perception of CSR in the Swedish fast food industry	Spring 2019
Corporate Social Responsibility (CSR) and Starbucks Consumers in Sweden Impact Of CST On Consumers' Purchase Attitude and Intention	Spring 2019
The financial performance of Islamic- and Commercial banks in the GCC countries	Spring 2019
Minimizing employee turnover - A study of how internal corporate social responsibility practices increase employees' willingness to stay at the company	Spring 2019
External Sustainability Assurance – What value do 'The Big Four' experience that their clients are provided?	Spring 2019
The importance of social capital for the opportunity to get employment - A study of the integration of Syrian refugees into the Swedish labor market	Spring 2019
How are organizations experienced? – A qualitative study about experiences of design and acoustic environment in the open-plan offices and the activity-based workplaces	Spring 2019
Green Consumer Behavior: Women's Attitudes towards Purchasing Organic Cosmetics	Spring 2019



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