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GENDER EQUALITY IN ENGINEERING THROUGH COMMUNICATION AND COMMITMENT (GEECCO)

WORK PACKAGE 6: Implementing GEPs: Focussing on the Gender Dimension in Research and Teaching

ANALYSIS OF CURRENT DATA ON GENDER IN RESEARCH AND TEACHING

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Contact Person | Bente Knoll

Organization | B-NK GmbH

E-Mail | bente.knoll@b-nk.at



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GEECCO – Gender Equality in Engineering through Communication and Commitment. In a Nutshell

Scientific and technological innovations are increasingly important in our knowledge-based economies. Today STEM (Science, Technology, Engineering, and Mathematics) is literally everywhere; it shapes our everyday experiences. With technologies we choose e.g. structures that influence over a very long time how people are going to work, communicate, travel, consume, and so forth. It is thus both a question of competitiveness and justice, to achieve gender equity within science and technology institutions, including policy and decision-making bodies.

GEECCO with its project lifetime from May 2017 to April 2021 aimed to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs were located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies.

GEECCO pursued the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field:

- (i) Setting up change framework and a tailor-made GEP for each participating RPO;
- (ii) Implementing gender criteria in the activities of RFOs;
- (iii) Setting up a self-reflective learning environment in and between all RPOs und RFOs to participate from existing experiences and match them with their specific needs and circumstances.
- (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project.

<http://www.geecco-project.eu/>

<https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate>

Further resources developed by the GEECCO-project consortium

All public deliverables, resources and additional material can be downloaded on this website:

<https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate>

Public deliverables (in order of the related work packages)

- Postorino, Maria Nadia; Marino, Concettina; Suraci, Federica; Enzenhofer, Bettina; Lusa, Amaia; Costa, Carme Martínez; Pulawska-Obiedowska, Sabina (2018): Gender Analysis of Decision-Making Processes and Bodies. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Bryniarska, Zofia; Żakowska, Lidia; Enzenhofer, Bettina; Postorino, Maria Nadia; Marino, Concettina; Lusa García, Amaia (2018): Current Status of Women Career Development. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Enzenhofer, Bettina; Lusa García, Amaia; Sarnè, Giuseppe; Żakowska, Lidia (2020): Overview on How to Increase Female Visibility. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Ratzler, Brigitte; Burtscher, Sabrina; Lehmann, Tobias; Mort, Harrie; Pillinger, Anna (2020): Enhanced Gender Knowledge and New Content. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Dvořáčková, Jana; Navrátilová, Jolana; Nagl, Elisabeth; Lasinger, Donia (2020): Guideline for Jury Members, Reviewers and Research Funding Organizations' Employees. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
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- Mergaert, Lut; Allori, Agostina; Ratzer, Brigitte; Enzenhofer, Bettina; Lusa García, Amaia; Marino, Concettina; Zakowska, Lidia; Bryniarska, Zofia (2020): Tailor-made Gender Equality Plans (GEP version 3.0). GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Knoll, Bente (2021): Dos and Don'ts while Degendering the STEM Field. Learning Experiences of Four European Universities and Two European Research Funding Organisations. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mergaert, Lut; Knoll, Bente; Renkin, Agnes (2021): Final Report on Supporting Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Jorge, Irene (2021): Implementation of Dissemination Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Jorge, Irene (2021): Engagement Activities. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lipinsky, Anke; Schredl, Claudia: Final Evaluation Report. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

Additional resources and literature reviews

- Knoll, Bente; Renkin, Agnes; Mergaert, Lut (2020): Additional resources (living document). GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Burtscher, Sabrina (2019): Literature Review: Gender Research in Human Computer Interaction. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Pillinger, Anna (2019): Literature Review: Gender and Robotics. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Mort, Harrie (2019): A Review of Energy and Gender Research in the Global North. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).
- Lehmann, Tobias (2020): Literature Review: Gender and Mobility. GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project).

Explanatory videos (available on Youtube)

- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Humans & Computers. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=vrWx91RdmGo>, checked on 4/30/2021.
- Ratzer, Brigitte; Enzenhofer, Bettina (2019): Robots in our society. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=bfXr29VAuwU>, checked on 4/30/2021.
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- Ratzer, Brigitte; Enzenhofer, Bettina (2021): Inclusive design – why intersectionality matters. Video produced under GEECCO. Gender Equality in Engineering through Communication and Commitment (a H2020 project). Available online at <https://www.youtube.com/watch?v=U4eRb1NM21A>, checked on 4/30/2021.

Evaluation and monitoring tutorials

Anke Lipinski and Claudia Schredl, both from GESIS, developed five online evaluation and monitoring tutorials.

1. GEECCO Data Monitoring Tool
2. GEECCO Infographic: Gender Equality Approaches and Their Impact on GEP Implementation
3. GEECCO Infographic: SMART Gender Equality Objectives
4. GEECCO Explainer Video: Gender Equality Plans in Technical Universities and the Use of Logic Models
5. GEECCO Log Journal

These tutorials can be downloaded on this website:

<https://www.tuwien.at/tu-wien/organisation/zentrale-bereiche/genderkompetenz/gender-in-der-forschung/geecco-resultate>

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List of contributors

- Bente Knoll
- Agnes Renkin
- Birgit Hofleitner
- Brigitte Ratzer
- Bettina Enzenhofer
- Núria Castell
- Amaia Lusa
- Elisabet Mas de les Valls
- Nadia Postorino
- Anton Pashkevich
- Lidia Zakowska

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About this document

The document is a report including the analysis of current data on gender in research (H2020 projects) and teaching (selected curricula and courses) of all 4 RPOs. The analysis was conducted under Task 6.1. This task is built on the starting workshop (held in WP3 in May 2017) as well as on the change framework developed in WP3 (see D3.4 – confidential).

Within this task, the main research focus fields and recent H2020-projects of all 4 RPOs were analysed and the (possible) gender dimensions were pointed out. Likewise, selected curricula and corresponding courses of all 4 RPOs were analysed to identify existing gender content as well as possibilities for an inclusion of gender perspectives in the current curricula.

This report serves as a basis for the future work of the RPOs when implementing der GEPs – especially when integrating gender dimensions in research and teaching.

Introduction

The overall approach in this analysis is based on three strategic approaches (Schiebinger, Londa: 2008)¹:

1. "Fixing the Numbers", which focuses on increasing women's participation in the e.g. STEM field [and on increasing men's participation in the e.g. primary educational field]. In general, "fixing the numbers" aims at promoting the under-represented sex in order to gain equal balance between women and men in all societal fields and in all professional areas.
2. "Fixing the Institutions", which promotes gender equality in careers through structural change in research performing organisations, such as universities.
3. "Fixing the Knowledge", which stimulates excellence in science and technology by integrating sex and gender analysis, gender sensitive methods and teaching concepts etc. into research and innovation.

The gender-in-research-concept includes generating gender-sensitive ideas for research proposals, formulating gender sensitive research questions and choosing a gender-sensitive methodology. Additionally, the use of language, the handling with data and the dissemination of results is to consider for carrying out research in a gender-sensitive way. For taking into account the gender dimension within research fields conception, methods, content, development and products/outcome of the research project should be evolved on the foundation of gender-sensitive research principles.

Gender in research content considers life realities of all genders and gender-specific research to fill knowledge-gaps. Integrating the gender dimension in research and innovation (R&I) content, helps to improve the scientific quality and societal relevance of the produced knowledge, technology and/or innovation. Considering gender dimensions adds a valuable dimension to research and innovation. New approaches in research and innovation may arise.

Methodology

The aim of T6.1. was to conduct an analysis of current data on gender in research and teaching. This task is built on the starting workshop (held in WP3) as well as on the change framework developed in WP3. Selected curricula of all RPOs were analysed to identify existing gender content as well as possibilities for an inclusion of gender perspectives in the current curricula. Likewise, the main research focus fields and recent H2020-projects of all RPOs were analysed and the (possible) gender dimensions were pointed out.

Analysis of research projects and fields

All recent H2020 projects of the 4 GEECCO-RPOs (TUW, UPC, UNIRC, PK) were analysed by reviewing the different research topics and issues and detecting the existing gender contents and perspectives within those topics.

This listing and categorisation was reached as follows:

- **Step 1: Listing of all H2020 Research Projects by university and mapping them in an excel spread sheet**
- **Step 2: Conduct a key word search**
- **Step 3: Reading and in-depth content analysis of the projects abstracts**

¹ Schiebinger, Londa (Ed.) (2008): Gendered Innovations in Science and Engineering. Stanford, Calif.: Stanford University Press.

- **Step 4: Ranking the projects with the help of a pre-defined ranking scheme**

As a **first step** and according to information provided by the four RPOs,

- all current H2020 research projects were listed within an excel sheet for each university.
- This excel sheet includes the project acronyms, project titles, H2020-ID numbers, role of university (coordinator or partner), related H2020 topic, URL (cordis database) and the abstracts of the projects.
- All abstracts were properly reviewed to decide whether the specific projects show some kind of gender related content, and if not, possibilities to include gender perspectives within the ideas and components of the projects were analysed.

To this end, the created excel spread sheets were extended with two more columns: one to ask about the gender related content (yes/no) and one to ask about possibilities for the inclusion of gender perspectives within the project. Projects that already include gender perspectives were marked with ‘yes’ and coloured in **yellow** within the corresponding column. If projects showed chances for implications of gender dimensions, they were marked with either obvious (coloured in **turquoise**) or implicit (coloured in **grey**).

After listing all H2020 research projects plus information from all RPOs within the excel sheet,

- the **second step** was to carry out a key word search with the same key words used in the study analysis. Those key words were:

Key Words:	Gender, Sex, Society, Social, Culture, Cultural, Woman, Women, Female, Age, Equality, Equal, Diversity, Diverse, Ethnic, Human
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Table 1: Overview on the key word used

The abstracts including the listed key words were read in the first place and inspected on gender related contents – not all of those projects were gender related – therefore it was very important to read the abstracts carefully and reflectively.

- Projects with gender related contents were marked in the adequate column with ‘yes’ and the colour **yellow**.
- Additionally, the key words within the abstracts, as well as the important words characterising the gender related content, were marked in **red**.
- Projects without gender related contents were marked with ‘no’ in the congruent column and reviewed on possibilities for an inclusion of gender perspectives.

After the key word search,

- the **third step** was the detailed reading of all remaining abstracts.

Within those remaining abstracts, there were still a few isolated projects that showed a gender related content and were accordingly marked. Furthermore, the detailed reading of the projects abstracts accentuated additional words to the already named key words, which were pointers for a gender related content or at least for possibilities to include gender perspectives. This is because within the research projects, the gender content can only be recognised by the contexts the words have been used in. Important words in this regard were:

Important words in the progress and context:	User(s), User-Groups, Need(s), Requirement(s), Tailor-Made, Tailored, Behaviour, Recommendation(s), Individual(s), Participation(s), Participative, Participatory, Participant(s),
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	Generation(s), Demand(s), Customized, Customer(s), Children, Young, Boys, Girls, Disability, Disabled, Mother, Father, Utilization, Citizen(s), Patterns, Preferences, Usefulness, Health, Life quality, Vulnerable Users, Elderly, Resident(s), Life-Situation(s), Circumstances, Living realities, Sustainable, Sustainability, Environment
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Table 2: Important words that were included during the process

By detailed reading of the projects abstracts, the important words within the abstracts were marked in red – on the one hand important words named above, on the other hand also words that were overall important for the context – and the assignation to either an existing gender related content or the obvious or implicit possibility for the inclusion of gender dimensions was made.

As a **forth step**, all the projects were accordingly marked

- in the column “Gender related content” with “yes” (coloured in yellow) or “no”
- or in the column “possibilities for an inclusion of gender” with
 - “obvious” (coloured in turquoise) or
 - “implicit” (coloured in grey)

The list below shows the adequate attributions and colours (in the internal analysis and in the tables of the research projects within this document):

Explanation of the colours for the analysis of the research projects:
no information found
Gender related content found within the project.
The project shows obvious possibilities for an inclusion of gender perspectives.
The project shows implicit possibilities for an inclusion of gender perspectives.
Explanation of the coloured text passages within the abstracts:
Key words
important words for the context of the project (sometimes indicators for an existing gender content or a possible inclusion for gender perspectives)

Table 3: Ranking scheme of the research projects analysis

In addition to the Excel sheet, the conclusions of the analysis are documented in tables within this document.

In conclusion, it was necessary to read all the abstracts in a detailed way (also all the abstracts without key words), because the recognition of gender related contents or possibilities for the inclusion of gender perspectives within research projects is very much dependant to the context and the way that the defined key words are used – for example: the occurrence of the words “social”, “human” or “culture” is not always an indicator for a gender related background, on the other hand the consideration of different user groups within a project, can be signal for an existing gender content or a chance for the inclusion of gender dimensions. It is possible that abstracts without any key words, have a potential for the inclusion of gender, and it is possible that abstracts with key words show none.

Overall, it is to say that almost all or a lot of projects would show some kind of possibility for the inclusion of gender perspectives, and at least all projects that concern human needs and requirements or that offer specific services for users, can be viewed from a gender perspective and easily involve gender dimensions.

Analysis of selected curricula

The selected studies of all RPOs were analysed by reviewing the different curricula of studies and courses and detecting the existing gender contents or possibilities to include gender perspectives within those curricula.

This listing and categorisation was reached as follows:

- **Step 1: Preparation: Clustering the fields of studies**
- **Step 2: Preparation: Data collection**
- **Step 3: Reading and in-depth content analysis of the curricula**
- **Step 4: Ranking the curricula with the help of a pre-defined ranking scheme**

In a preliminary **step 1**, the selected fields of studies of all four universities were listed and grouped by universities and organised into superior study groups in order to show overlaps regarding the fields of study in the different universities. Based on that exercise, groups of studies were developed.

To prepare properly for the gender analysis of all the curricula and as a preliminary **step 2**, a document was generated to collect and list all the courses of the different fields of studies by university. For that step, it was necessary to

- investigate all the various curricula of the universities and studies,
- find the actual study plans for every field of study
- and insert the structure, modules and courses of the particular study into a common document.

In some cases, it was necessary to translate the list of courses or single course titles into English. All RPOs partners provided support to find the corresponding documents and, as for PK, the PK-team conducted the work, because only a few curricula were available in English. This document, generated through the research of the studies and curricula, formed the foundation for the following proper analysis.

After researching the curricula and allying all the courses of the particular studies into one document, all fields of studies were analysed, and the existing gender content of the subjects and courses was identified study field by study field – as a **third step**:

- By researching and detailed reading of the curricula and course descriptions, gender contents, as for courses including aspects related to the equality of women and men as well as to society aspects and culture, were recognised and pointed out.

The **detailed research for existing gender contents** in the instructions and descriptions of the various courses within the curricula of the selected fields of studies was conducted as follows:

- Key words were identified to search for in the course descriptions.
- If a key word was found, the course description was read properly and in case of an identified gender content within the course – content-related or didactically – the specific course was marked with the text highlighting tool in the colour yellow within the document with the united course lists.
- Additionally, the text section containing the information about the gender content was copied out of the course description and pasted into the course list – to document the specific content and justify the choice.

The table beneath shows the exact procedure for the identification of existing gender contents:

Identification of existing gender contents	
Rationale	To recognise existing gender contents in courses of the selected studies of the four RPO's. To recognise which courses include gender perspectives. To recognise what kind of gender perspectives are included in the courses – content-related or didactic – and if content-related, what kind of gender content is addressed.
Procedure	<ol style="list-style-type: none"> 1. Detailed reading of the curricula and course descriptions of all courses that are listed in the curricula of the selected studies of the four RPOs 2. Search for key words (in curricula and course descriptions) 3. Detailed reading of the text section(s) with key words 4. Mark the concerning course in the course list with the yellow highlighting colour (see below) 5. Copy the relevant text section and paste it in the course list - for justifying the choice and documenting the form of gender content
Key words	Gender, Sex, Woman, Women, Female, Equality, Equal, Diversity, Diverse
Highlighting colour for courses with existing gender content	

Table 4: Procedure, key words and examples for the identification of existing gender contents

After analysing the existing gender content in each course and field of study, **possibilities for an inclusion of gender perspectives** were pointed out, by listing various courses within each field of study, which would show a chance for a possible inclusion of gender perspectives and gender contents based on the experts' review.

The pick of courses with possibilities for gender inclusions within the curricula of all the selected studies of the four RPOs was performed in a qualitative procedure with a bottom-up-approach and was based on the expert's review. Therefore, it was within the professional discretion of the expert to decide whether courses show chances to include gender perspectives into their curricula or not.

- General considerations on how to choose the relevant courses, were mainly based on the wordings of the course title, but also on the descriptions of the course contents.

After viewing various literature and tool-kits on the subject and researching case studies on gender research and how to include gender topics and perspectives into teaching, it was reasonable and plausible to think about ways to include gender into the different studies, modules and subjects.

- Further, the chosen courses were divided into courses which show an **obvious possibility** to include gender issues, and courses where the chance for gender involvements is **implicit**.

The definitions, differences and examples for obvious and implicit possibilities to include gender issues into courses, are explained and shown within the table beneath. For example, it would be obvious to include gender perspectives into architecture and urban planning subjects, in a way that planning for people should always require considerations of people's needs – at least those people who the engineer is planning for – therefore social, demographic and cultural aspects etc. should be part of those curricula. On the other hand, foreign language courses would offer chances to include gender perspectives, as it would be possible to analyse gender issues in a foreign language or learn how to speak that language in a gender sensitive way - so teachers could work on gender contents or demonstrate gender mainstreaming in a didactic and implicit way. Based on those considerations, it was possible to analyse and view the list of courses in a more elaborated and reflective way.

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The table beneath shows the exact procedure for the identification of possibilities for an inclusion of gender perspectives:

Identification of possibilities for an inclusion of gender perspectives	
Rationale	<p>To identify courses with the possibility to include gender perspectives.</p> <p>To find ways to include gender perspectives into didactics or contents of these courses.</p> <p>To enrich technical and engineering studies with more gender related contents and critical thinking.</p> <p>To create and increase gender awareness for engineering students and future engineers.</p>
Procedure	<ol style="list-style-type: none"> 1. Check all courses (from all selected studies of the four RPOs) 2. Mark courses that show possibilities to include gender perspectives into their curricula <ul style="list-style-type: none"> - based on the wordings of the course title and on the descriptions of the course contents - based on the professional review and judgement of the experts based on the research question “Is there any chance to include gender perspectives into the teaching of the subject in a didactive or content-related way and how?” 3. Check the descriptions of the selected courses 4. Divide the marked courses into courses which show an obvious possibility to include gender issues, and courses where the chance for gender involvements is implicit – again, based on the judgement of the expert 5. Highlight the concerning courses in the course list with the adequate highlighting colour: turquoise for obvious/grey for implicit possibilities for gender inclusions (see below)
Obvious possibilities	<p>Subjects that are based on human interactions, history, business management, hierarchies, planning procedure, change management, ...</p> <p>All subjects where considerations of people’s needs should be taken into account – at least the needs of those people who the engineer is planning for</p>
Examples	<p>Courses on/that include:</p> <p>Communication, Presentation, Management, Business, Economics → all related to users, human; Society</p> <p>Architecture and urban planning subjects; human interaction with engineering, Users, Teambuilding, Leadership, Entrepreneurship, History, Planning, Urbanism, Mobility, Culture, Sustainability, Social Commitment, etc.</p>
Highlighting colour for courses with obvious possibilities	

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Implicit Possibilities	Subjects that indicate possibilities to include gender dimensions, regarding women and men as well as different living realities, in a more abstract way. For example: use statistics, probabilities or foreign language texts/exercises regarding gender perspectives (differences between women and men or different living realities)
Examples	Courses on/that include: Data, Statistics, Visions, Modelling, Optimizations, Methods, Problem Solving, Quality management, Energy, Environment, Materials, Design, Analysis, Life insurance, Probabilities, Measures, Logistics, Transportation, Future, New Trends, Foreign Languages, Master thesis, etc.
Highlighting colour for courses with implicit possibilities	

Table 5: Procedure, key words and examples for the identification of possibilities for an inclusion of gender perspectives

On these thoughts and grounds, and after a final confirmation and feedback of the different universities, the relevant courses were chosen.

The list below shows the adequate attributions and colours (in the internal analysis and in the tables of the curricula analysis within this document):

Explanation of the colours for the analysis of the research projects:
Courses with existing gender related content
Courses with obvious possibilities to include gender perspectives
Courses with implicit possibilities to include gender perspectives

Table 6: Ranking scheme of the curricula analysis

Curricula Structure

A schematic table of the particular curricula structures of the universities allows a comparison for the universities themselves and shows how information for a particular field of study or for a course is prepared by university. The tables display the content and structure of the curricula documents and the course descriptions and demonstrate therefore what information the students can gather in advance to a study or a course.

Overview: Universities, selected fields of studies and groups of studies

Bringing together and revising all the different selected fields of study of the four universities for this task, the following table emerges and summarises the various fields of studies occurring in this analysis, assigning them to 12 different groups of studies, marking the universities where the studies are provided and highlighting congruences between the universities (blue).

Group of Studies	Field of Studies	TUW	UPC	UniRC	PK
Civil Engineering	Bachelor Civil Engineering		x	x	x
	Master Civil Engineering		x	x	x
Industrial Engineering	Bachelor Industrial Technology Engineering		x		
	Master Industrial Engineering		x		
Informatics Engineering	Bachelor Informatics Engineering		x		
	Master in Innovation and Research in Informatics		x		
Electrical Engineering	Bachelor Electrical Engineering and Information Technology	x			
	Master Embedded Systems	x			
	Master Microelectronics and Photonics	x			
Transport Engineering	Bachelor Transport Planning				x
	Master Design of Infrastructure and Transport Systems (specialization of Master in Civil Engineering)			x	
Telecommunications	Master Telecommunications Engineering		x		
	Master Telecommunications	x			
	Bachelor Telecommunications Technologies and Services Engineering		x		
Mechanical Engineering	Bachelor Mechanical Engineering	x			x
	Master Mechanical Engineering	x	x		x
	Bachelor Mechanical Engineering - Management	x			
	Master Mechanical Engineering - Management	x			
Biomedical Engineering	Master Biomedical Engineering	x	x		
Mathematics	Bachelor Technical Mathematics	x			
	Bachelor Statistics and Mathematics in Economics	x			
	Bachelor Financial and Actuarial Mathematics	x			
	Master Technical Mathematics	x			

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Group of Studies	Field of Studies	TUW	UPC	UniRC	PK
	Master Statistics and Mathematics in Economics	x			
	Master Financial and Actuarial Mathematics	x			
Architecture Studies	Bachelor Architecture		x		
	Master Architecture		x		x
Environmental Engineering	Bachelor Environmental Engineering			x	
	Master Environmental Engineering		x	x	
	Bachelor Agricultural, Environmental and Landscape Engineering		x		
Energy Engineering	Bachelor Energy Engineering			x	
	Master Energy Systems and Automation Technology	x			

Table 7: Universities, selected fields of studies and groups of studies

Research areas and their (possible) gender dimensions

The statements on possible implementations of the gender dimension into different research fields in this chapter are mainly based on Londa Schiebingers ideas of implementing the gender dimension and therefore on the following sources (see also D 8.1):

- Schiebinger, Londa; Klinge, Inga; Sánchez de Madariaga, Ines; Schraudner, Martina; Stefanick, Marcia: Gendered Innovations in Science, Health & Medicine, Engineering and Environment. <http://genderedinnovations.stanford.edu/index.html> [27.04.2018].
- Schiebinger, Londa; Klinge, Ineke (2013): Gendered innovations. How gender analysis contributes to research. European Commission (EC). Luxembourg. http://ec.europa.eu/research/science-society/document_library/pdf_06/gendered_innovations.pdf [27.04.2018].
- Schiebinger, Londa; Schraudner, Martina (2011): Interdisciplinary Approaches to Achieving Gendered Innovations in Science, Medicine, and Engineering 1. In: Interdisciplinary Science Reviews 36 (2), S. 154–167. DOI: 10.1179/030801811X13013181961518.

Gender Studies in Engineering – on a general level

Engineering studies and research show a significant underrepresentation of women, despite national and international efforts. Including gender perspectives into engineering studies could raise awareness of the issue amongst students and therefore future employees and their impacts on society and innovation.

Integrating gender studies into the engineering curricula further helps to prevent the exclusion of certain perspectives in the field and can grow more understanding, mindfulness and consideration regarding gender in future positions. Including gender perspectives into different curricula can motivate future engineers to act, design, produce and analyse with an awareness of gender, meaning socio-cultural factors as well as biological factors, from the very beginning.

The inclusion of gender perspectives and issues into engineering studies and research aims to address and consider women's and men's needs equally, to encourage equal participation of women and men in study and research and to create working conditions cultures, which are equally fulfilling for men and women.

Having reviewed all the pre-selected fields of studies, curricula and courses of the four RPOs, it is to say, that only view courses address gender perspectives at this point, but a large variety of courses, if not all of them, would have potentials to include gender perspectives. Especially subjects addressing management, research, communication, presentation and scientific work provide a lot of possibilities for including gender issues.

Architecture Studies

Including gender perspectives and analysis in architectural studies means to integrate the needs of all or specific inhabitants in the process of urban planning and architectural design – requirements of women and men of different ages, with different family configurations, employment patterns, socioeconomic status, burdens of caring responsibilities and physical abilities. Considering gender issues within the planning process therefore allows to generate housing, neighbourhoods and urban spaces – such as parks, public open spaces, pathways etc. - that better address people's everyday needs. Including gender perspectives into architectural planning and research design could mean for example to integrate and consider caring issues for children, elderly or disabled people. Gender perspectives in architecture studies aim to improve living conditions for its residents as well as pedestrian mobility and use of space for all people.

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Therefore, it is very important to include gender perspectives in architecture studies. Gender views can be very well contained in subjects that address matters of planning (especially urban planning) or matters of planning and architecture history. Also courses regarding environment or sustainability can be chosen to include perspectives of gender.

Civil Engineering

Civil engineering is related to the field of architecture and addresses the design, construction and maintenance of the built environment – including roads, bridges, canals, buildings etc. As the subject addresses spaces regarding mobility and living, it is essential to consider the needs of users (inhabitants and residents) in the designing and planning process – different user groups such as children, men, women, families, the elderly etc. should be respected equally. Civil Engineering includes a broad variety on courses and issues, depending on the main focus of the particular study. The field expects knowledge in natural sciences, construction, statistics etc., as well as in economics, business and management. The study can further deal with the environment, urbanism and infrastructure, architectural subjects, transportation (also regarding shipment and flying) etc. Some studies have particular specialisations.

As Civil Engineering means building and construction for users, gender perspectives should and can be included in multiple courses. Above all, courses regarding social aspects, culture, history, architecture, urbanism, environment, infrastructure and management offer opportunities to include gender issues into the specific curriculum.

Environmental Engineering

The field of environmental engineering specializes on the application of scientific and engineering principles – regarding local and global environmental protection from effects of natural and human activities and likewise the protection of human populations from the effects of environmental factors. Aspects in this field are for example the reduction of pollution, management of waste disposal, and mitigation of the impact of human industrial activity.

As environmental engineering addresses human impacts on the environment, it can be essential to analyse gender perspectives and behaviours in this regard – meaning attitudes, reactions and actions of women and men in relation to climate change, waste management, land use, sustainability etc. In this case social factors, such as age, income, educational background, and geographic location are to recognize as well. Knowledge about different behaviours and attitudes can help to generate measures for a better environment. Perspectives of society, culture and thus gender can be included in a variety of courses, as environment and landscape affect us all.

Energy Engineering

Energy engineering deals with energy efficiency, energy services, facility management, plant engineering, environmental compliance and alternative energy technologies. It connects the fields of physics, mathematics, and chemistry with economic and environmental engineering approaches. The aim of this field is to increase efficiency - find the most efficient and sustainable ways to operate buildings and manufacturing processes, and also to develop renewable sources of energy. In fact, that means to consider and suggest the best lighting, insulation, heating and cooling properties of buildings. An energy engineer is concerned (or at least should be concerned) about using energy in the most environmentally friendly and sustainable ways, but their field is not limited to strictly renewable energy.

Gender perspectives can be included into courses of this field by analysing different access to energy technologies, perception of technologies, as well as energy needs and use. These aspects are to consider under the different views of women and men, but also different views relational to age, ethnical and cultural backgrounds, life circumstances etc.

Biomedical Engineering

Biomedical Engineering combines technical, biological and medical know-how and is a field of study that addresses technological innovation as well as healthcare. The field is directly connected to health and therefore to the needs of people, especially physically impaired ones – such as disabled persons or the elderly for example. Research in Biomedical Engineering provides for example implantable medical devices, such as artificial hips, or 3-D printing of biological organs etc. Analysing data with focus on sex and gender, such as studying different needs and developments of women and men considering their age, can lead to new and more personalized technological innovations – for example in assistive technologies, robotics etc. The analysis of interactions of gender and sex in women and men, as well as considering ethnical backgrounds, can lead to better knowledge about physical needs and the human body, and consequently to better and more effective designs regarding assistive technologies and medical devices. It can lead to products, devices, and therapies designed for a broad population. Gender perspectives can therefore be included in courses regarding the human body or analysis of data and research.

Telecommunications

The study field Telecommunications signifies the transmission and exchange of information electronic means and implies all types of voice, data and video transmission. It is a broad field that includes a wide range of information transmitting technologies such as telephones, microwave communications, fibre optics, satellites, radio and television broadcasting, the internet and telegraphs. As all data and information is transmitted in some way from and for people, it is obviously necessary to consider people's needs in research regarding telecommunications. Further, the term telecommunication in itself implies communication and communication in speech and/or vision likely includes gender perspectives in a certain way. For example, machines can generate human-like speech, which are historically grown mostly male speech synthesis. Other than that, connecting telecommunication with linguistic research could provide information about the effects of the wording of technologies and software on different user groups. Gender analysis is important to create telecommunication systems that show awareness on the societal and selective personal outcomes of voice, formulation and vision. Amongst other things, gendered stereotypes that are automatically produced in users' minds, when listening to a male or female voice, or looking at a certain picture, are to be recognized. As these kinds of technologies become increasingly important in a global world, it is vital that researchers design with an awareness of gender from the very beginning and therefore students should already learn about its importance and future effects on society. Technology and culture collude in this field.

Electrical Engineering

Electrical engineering is one of the largest engineering disciplines and generally deals with the study and application of electricity, electronics, and electromagnetism. Electronics are part of daily life since commercialization, the telephone, electric power and at last broadcasting as well as recording media. Electrical engineering is subdivided into a wide range of subfields including electronics, digital computers, computer engineering, power engineering, telecommunications, control systems, radio-frequency engineering, signal processing, instrumentation, and microelectronics. Many of these subdisciplines overlap and also overlap with other engineering branches. Therefore, the study field Telecommunications is a part of Electrical Engineering and addresses similar issues regarding gender perspectives. Almost every household includes electronics and all different kinds of inhabitants and users worldwide are confronted with the field in their private homes, at work and in public buildings or spaces etc. Technology and electronics collide with society and culture and those fields therefore are bound to recognize different user groups and needs as well as requirements.

Gender perspectives should on the one hand be integrated in the wording, audience and work of Electrical Engineers in research, communication, management issues etc. On the other hand, various

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technical study courses can and should be used to grow awareness regarding the importance of gender perspectives for future electrical engineers.

Informatics Engineering

Informatics Engineering or Computer Engineering is a discipline that is directly related to Electrical Engineering. It combines several fields of electrical engineering and computer science to develop computer hardware and software. Computer engineers are dealing with hardware and software aspects of computing – from designing of individual microcontrollers, microprocessors, personal computers, and supercomputers, to circuit designing. The field focuses on how computer systems work and how they integrate into the larger picture. Other than that, computer engineers are also suited for robotics research. Informatics are fundamentally influencing society, change, globalisation and everyone's daily life. Informatics confront us all in work situations as well as leisure time situations and have broad socio-cultural effects. Therefore, it is essential to include male and female perspectives on the field equally and consider different requirements regarding to age, living situations and ethnical backgrounds of people. The handling with data and analysis, language techniques, as well as research and development in the field should be in focus of acting in a way that respects and considers sustainability, environment, society and gender issues. University courses in the field can draw the attention to rethinking language and visual representations considering sex and gender within informatics and address female and male students in an equal intensity.

Industrial Engineering

Industrial Engineering deals with the optimization of complex processes, systems, and organizations. The aim is to eliminate waste of time, money, materials, person-hours, machine time, energy and other resources that do not generate value and to create engineering processes and systems that improve quality and productivity. Industrial technology aims to make production faster, simpler and more efficient by using engineering and manufacturing technology. It involves the management, operation, and maintenance of complex operation systems, and the planning and designing of manufacturing processes and equipment. Students in this field are educated to become creative and technically proficient individuals who can help a company achieve efficient and profitable productivity.

The study discipline should offer a multidisciplinary view on the field and broad knowledge to industrial technologies. The courses of the study field provide the students with basic scientific and technological insights, introduce them to essential methods and theories and combine technological skills with business aspects as well as social and environmental perspectives. Focus lies on changing working environments and to future technological developments that will improve products and processes in the sector. Industrial Technology programs typically include: instruction in optimization theory, human factors, organizational behaviour, industrial processes, industrial planning procedures, computer applications, and report and presentation preparation. The study of industrial engineering overlaps with certain business-oriented disciplines such as operations management, project planning, supervision and management.

The optimization of human work environments and focus on future technologies for improvement and efficiency is directly connected to human well-being. The connection of society, culture and technology and the historical development of the field in different parts of the world can lead to the discussion and inclusion of socio-cultural factors and thus of gender issues.

Additionally, certain courses could include the fact that specific designs can promote gender equality. Designs and approaches can be a catalyst for change in gender norms, relations, and identities. Gender attitudes and behaviours can be influenced by designs and speech, for example by designs of computer games etc., which are especially important through the fact that games are spaces where young people socialize. Diversity and gender stereotypes can be addressed this way. Analysing sex and gender - such as age, experience, and geographic location - throughout engineering innovation processes can lead to more awareness and change in this regard.

Mechanical Engineering

Mechanical engineering is an engineering discipline mainly concerned with the use of machines in industry, and responsible for industrial applications of mechanics, as well as the production of tools, machinery, and their products. The field involves the design, production, and operation of machinery and combines engineering, physics, and materials science principles with design, analysis, manufacture, and mechanical systems. It requires an understanding of mechanics, dynamics, thermodynamics, materials science, structural analysis, and electricity. In addition to these core principles, mechanical engineers use tools such as computer-aided design (CAD), and product life cycle management to design and analyse manufacturing plants, industrial equipment and machinery, heating and cooling systems, transport systems, aircraft, watercraft, robotics, medical devices, weapons, and others.

The field of mechanical engineering is perhaps the broadest and most diverse of engineering disciplines and overlaps with automotive and aerospace engineering, metallurgical engineering, civil engineering, electrical engineering, computer engineering, manufacturing engineering, chemical engineering, industrial engineering, automation, energy engineering etc. It is also possible for mechanical engineers to work in the field of biomedical engineering, specifically with biomechanics, transport phenomena, biomechatronic, bio nanotechnology, and modelling of biological systems. The breadth of the mechanical engineering discipline allows students a variety of career options and could also launch a career in medicine, law, consulting, management, banking, finance, and so on.

A mechanical engineer in general has the role to bring a product from an idea to the marketplace. For that, he/she needs to understand the needs and views of the potential users and user groups of the product. Mechanical engineering requires to analyse and design objects and systems, considering functionality, aesthetics and user-friendliness. Analysing and considering gender perspectives in this field lead to better products for everyone.

Mathematics

Mathematics deals with the logic of shape, quantity and arrangement. It is all around us, in everything we do. It is the fundament for everything in our daily lives, including for example mobile devices, architecture, art, money, engineering, even sports etc. Recorded history shows the importance of mathematics in every civilized society – the more complex a society, the more complex the mathematical needs. Mathematics is further the science of numbers, their operations, interrelations, combinations, generalizations, abstractions and of space configurations and their structure, measurement, transformations, and generalizations.

To include gender perspectives into the field of mathematics, it is possible to refer to the needs of mathematics in different societies and cultures, as well as different views on mathematics, and to the role and importance of mathematics in other disciplines and our daily lives. Other than that, historical figures in mathematics can be made to a subject of discussion regarding sex and gender. In addition, it is to keep in mind to use gender friendly wording and appellation in speech and text samples.

In-depth analysis of TUW

The following chapter shows the results and outcomes of the in-depth gender analysis of TUW regarding research and teaching, based on current H2020 projects and selected curricula and courses. The sources used for the analysis, such as a list of current H2020 funded projects and a selection of curricula was provided by the RPO-partner. As for the analysis of the curricula the English version of the RPO's website was used a data source. The analysis points out where gender content is already included, and which courses or projects show possibilities for an involvement of the gender dimension. Therefore, the chapter is divided into 1) Research and 2) Teaching. The analysis was carried out according to the methodology, described in the respective chapter.

Research

The following table shows all research projects of TUW, granted under H2020 in a period from 2014 to 2017. Furthermore, the table categorises it regarding to the detected gender related contents and possibilities to include gender perspectives.

The table shows a broad variety and number (106) of different H2020 research projects that have been analysed at TUW: 8 H2020 research projects already show some kind of gender perspectives within their content and a broad range of projects show possibilities (either obvious or implicit) to implement the gender dimension. Some of the projects are marked with no gender related content and no possibility to include gender perspectives. Though it is to mention that in all the research projects it would be possible to consider the gender dimension in some way.

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
ACROSSING Advanced TeChnologies and PlatfoRm fOr Smarter ASSisted LiVING http://cordis.europa.eu/project/rcn/198322_en.html	676157	no	yes	-
ADWICE-Phase1 Advanced Wireless Technologies for Clever Engineering http://cordis.europa.eu/project/rcn/196933_en.html	664354	no	no	implicit
A-LEAF An Artificial Leaf: a photo-electro-catalytic cell from earth-abundant materials for sustainable solar production of CO2-based chemicals and fuels http://cordis.europa.eu/project/rcn/206200_en.html	732840	no	no	no

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
ALMA ALL-SCALE PREDICTIVE DESIGN OF HEAT MANAGEMENT MATERIAL STRUCTURES WITH APPLICATIONS IN POWER ELECTRONICS http://cordis.europa.eu/project/rcn/196836_en.html	645776	no	no	no
ANSWER ANTibioticS and mobile resistance elements in WastEwater Reuse applicaitons: risks and innovative solutions http://cordis.europa.eu/project/rcn/198297_en.html	675530	no	no	obvious
AnyPLACE Adaptable Platform for Active Services Exchange http://cordis.europa.eu/project/rcn/194460_en.html	646580	no	no	obvious
APOLLO Advisory platform for small farms based on earth observation http://cordis.europa.eu/project/rcn/199271_en.html	687412	no	no	obvious
AQUARIUS BROADBAND TUNABLE QCL BASED SENSOR FOR ONLINE AND INLINE DETECTION OF CONTAMINANTS IN WATER http://cordis.europa.eu/project/rcn/206077_en.html	731465	no	no	implicit
AQuS Analog quantum simulators for many-body dynamics http://cordis.europa.eu/project/rcn/193751_en.html	640800	no	no	implicit
ARCADES Algebraic Representations in Computer-Aided Design for complEx Shapes http://cordis.europa.eu/project/rcn/198309_en.html	675789	no	no	obvious
AURES Auctions for Renewable Energy Support: Effectivte use and efficient implementation option http://cordis.europa.eu/project/rcn/194421_en.html	646172	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
BestRES Best practices and implementation of innovative business models for Renewable Energy aggregatorS http://cordis.europa.eu/project/rcn/200557_en.html	691689	no	no	implicit
BioNetIllustration BioNetIllustration: User centric illustrations of biological networks http://cordis.europa.eu/project/rcn/209267_en.html	747985	no	no	implicit
BRISKEE Behavioural Response to Investment Risks in Energy Efficiency http://cordis.europa.eu/project/rcn/194630_en.html	649875	no	no	obvious
CABRISS Implementation of a Circular economy Based on Recycled, reused and recovered Indium, Silicon and Silver materials for photovoltaic and other applications http://cordis.europa.eu/project/rcn/196816_en.html	641972	no	no	implicit
CHEETAH Changing Energy Efficiency Technology Adoption in Households http://cordis.europa.eu/project/rcn/205440_en.html	723716	no	no	obvious
Click-It “In Vivo Click PET Imaging Agents”: Improving clinical nanomedicine diagnosis http://cordis.europa.eu/project/rcn/199755_en.html	668532	no	no	implicit
COFFEE Condensed-phase Optical-Femtosecond-Fringe-Encoded EUV Diffraction http://cordis.europa.eu/project/rcn/195424_en.html	657272	no	no	no
CPS Summit Transatlantic CPS-Summit http://cordis.europa.eu/project/rcn/194164_en.html	644184	no	no	implicit

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
CREMA Cloud-based Rapid Elastic Manufacturing http://cordis.europa.eu/project/rcn/193459_en.html	637066	no	no	implicit
CSI.interface A molecular interface science approach: Decoding single molecular reactions and interactions at dynamic solid/liquid interfaces https://cordis.europa.eu/project/rcn/204095_en.html	677663	no	no	no
CSTAT: UpDeep Upscaling deep buried geochemical exploration techniques info european business	16329	No information available		
EASITrain European Advanced Superconductivity Innovation and Training https://cordis.europa.eu/project/rcn/211599_en.html	764879	no	no	implicit
E-CAM An e-infrastructure for software, training and consultancy in simulation and modelling http://cordis.europa.eu/project/rcn/198333_en.html	676531	no	no	obvious
ELENA Low energy ELEctron driven chemistry for the advantage of emerging NANO-fabrication methods http://cordis.europa.eu/project/rcn/205408_en.html	722149	no	no	implicit
EMMC-CSA European Materials Modeling Council http://cordis.europa.eu/project/rcn/205444_en.html	723867	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
EN_ACTI2NG European Network on Anti-Cancer Immuno-Therapy Improvement by modification of CAR and TCR Interactions and Nanoscale Geometry http://cordis.europa.eu/project/rcn/205487_en.html	721358	no	no	obvious
EoC Ethics of Coding: A Report on the Algorithmic Condition http://cordis.europa.eu/project/rcn/207025_en.html	732407	no	yes	-
ER4STEM Educational Robotics for STEM http://cordis.europa.eu/project/rcn/198082_en.html	665972	no	yes	-
ERICA Engineered Calcium-Silicate-Hydrates for Applications https://cordis.europa.eu/project/rcn/211613_en.html	764691	no	no	implicit
ETAB Entangled Twin Atom Beams http://cordis.europa.eu/project/rcn/195285_en.html	656530	no	no	no
EUROfusion Implementation of activities described in the Roadmap to Fusion during Horizon 2020 through a Joint programme of the members of the EUROfusion consortium http://cordis.europa.eu/project/rcn/193159_en.html	633053	no	no	no
EWIT B (EWIT) E-Waste Implementation Toolkit Development http://cordis.europa.eu/project/rcn/193845_en.html	641660	no	no	obvious
ExMAG Excitronic Magnetism in Strongly Correlated Materials http://cordis.europa.eu/project/rcn/194472_en.html	646807	no	no	no
FACTS4WORKERS http://cordis.europa.eu/project/rcn/196604_en.html	636778	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
FAIR Stations Future Secure and Accessible Rail Stations https://cordis.europa.eu/project/rcn/211620_en.html	777636	no	no	obvious
FaLiCaB Fast and Lightweight Capacity Benchmarking of Mobile Broadband Networks in MONROE https://cordis.europa.eu/project/rcn/194202_en.html	644399	no	no	obvious
Fit-to-nZEB Innovative training schemes for retrofitting to nZEB-levels https://cordis.europa.eu/project/rcn/210594_en.html	754059	no	no	implicit
FLOBOT Floor Washing Robot for Professional Users http://cordis.europa.eu/project/rcn/194316_en.html	645376	no	no	obvious
FLOWERPOWER Establishing a new generation of horticulturists: Multidisciplinary approach for breeding innovative novelties using classical and biotechnological methods http://cordis.europa.eu/project/rcn/197990_en.html	675657	no	no	implicit
Fora Fog Computing for Robotics and Industrial Automation https://cordis.europa.eu/project/rcn/211630_en.html	764785	no	no	implicit
GEECCO Gender Equality in Engineering through Communication and Commitment https://cordis.europa.eu/project/rcn/210240_en.html	741128	yes	yes	-
GRAPHENE FPA Graphene-based revolutions in ICT and beyond	649953	No information available		
GrapheneCore1 Graphene-based disruptive technologies http://cordis.europa.eu/project/rcn/200853_en.html	696656	no	no	no

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
GROW GROW Observatory http://cordis.europa.eu/project/rcn/203271_en.html	690199	no	no	obvious
Heat-To-Fuel Biorefinery combining HTL and FT to convert wet and solid organic, industrial wastes into 2nd generation biofuels with highest efficiency https://cordis.europa.eu/project/rcn/211646_en.html	764675	no	no	no
HERCULES-2 FUEL FLEXIBLE, NEAR -ZERO EMISSIONS, ADAPTIVE PERFORMANCE MARINE ENGINE http://cordis.europa.eu/project/rcn/196603_en.html	634135	no	no	no
HISENTS High level Integrated SEnsor for NanoToxicity Screening http://cordis.europa.eu/project/rcn/200813_en.html	685817	no	no	no
HoloBH Infinite-dimensional symmetries, black holes, and holography https://cordis.europa.eu/project/rcn/209962_en.html	746297	no	no	no
HotMaps Heating and Cooling: Open Source Tool for Mapping and Planning of Energy Systems http://cordis.europa.eu/project/rcn/205761_en.html	723677	no	no	obvious
HTS 14 High temperature superconducting materials for fusion magnets http://cordis.europa.eu/project/rcn/193159_en.html	633053	no	no	implicit
Ibroad Individual Building (Renovation) Roadmaps https://cordis.europa.eu/project/rcn/210338_en.html	754045	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
INTER-IoT Interoperability of Heterogeneous IoT Platforms - INTER-IoT https://cordis.europa.eu/project/rcn/199587_en.html	687283	no	no	implicit
I-REACT Improving Resilience to Emergencies through Advanced Cyber Technologies http://cordis.europa.eu/project/rcn/203294_en.html	700256	no	no	obvious
KConnect Khresmoi Multilingual Medical Text Analysis, Search and Machine Translation Connected in a Thriving Data-Value Chain http://cordis.europa.eu/project/rcn/194242_en.html	644753	no	no	implicit
MEHYB Many-body effects in hybrid quantum systems http://cordis.europa.eu/project/rcn/195512_en.html	657788	no	no	no
MinFuture Global material flows and demand-supply forecasting for mineral strategies http://cordis.europa.eu/project/rcn/206335_en.html	730330	no	no	implicit
MMAC-Phase1 Centre of Excellence for Mathematical Modeling and Advanced Computing http://cordis.europa.eu/project/rcn/196936_en.html	664405	no	no	implicit
MusicBricks Musical Building Blocks for Digital Makers and Content Creators http://cordis.europa.eu/project/rcn/194257_en.html	644871	no	no	implicit
MUSTEC Market uptake of Solar Thermal Electricity through Cooperation https://cordis.europa.eu/project/rcn/211264_en.html	764626	no	no	implicit

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
NanoBragg nanofiber-based atomic Bragg structures http://cordis.europa.eu/project/rcn/195622_en.html	658556	no	no	no
NANO-CATHEDRAL Nanomaterials for conservation of European architectural heritage developed by research on characteristic lithotypes http://cordis.europa.eu/project/rcn/196845_en.html	646178	no	no	implicit
NHQWAVE Non-Hermitian Quantum Wave Engineering http://cordis.europa.eu/project/rcn/199948_en.html	691209	no	no	no
NOVOFLOP Non-Volatile Magnetic Flip Flop http://cordis.europa.eu/project/rcn/199368_en.html	692653	no	no	no
nuClock Towards a nuclear clock with Thorium-229 http://cordis.europa.eu/project/rcn/196950_en.html	664732	no	no	no
openEO openEO - a common, open source interface between Earth Observation data infrastructures and front-end applications https://cordis.europa.eu/project/rcn/212222_en.html	776242	no	no	implicit
PAAnaMoL Proof-theoretic Analysis of Modal Logics http://cordis.europa.eu/project/rcn/195879_en.html	660047	no	no	no
Photo-Emulsion Towards next generation eco-efficient photo and emulsion polymerization https://cordis.europa.eu/project/rcn/211720_en.html	765341	no	yes	-
PLASMECS NanoPlasmoMechanical Systems http://cordis.europa.eu/project/rcn/206064_en.html	716087	no	no	no

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
PLATIRUS PLATInum group metals Recovery Using Secondary raw materials https://cordis.europa.eu/project/rcn/206334_en.html	730224	no	no	no
Powerstep Full scale demonstration of energy positive sewage treatment plant concepts towards market penetration http://cordis.europa.eu/project/rcn/196805_en.html	641661	no	no	implicit
Productive4.0 Electronics and ICT as enabler for digital industry and optimized supply chain management covering the entire product lifecycle https://cordis.europa.eu/project/rcn/210800_en.html	737459	no	no	implicit
progRESSHEAT Supporting the progress of renewable energies for heating and cooling in the EU on a local level http://cordis.europa.eu/project/rcn/194458_en.html	646573	no	no	implicit
PV-Prosumers4Grid Development of innovative self-consumption and aggregation concepts for PV Prosumers to improve grid load and increase market value of PV https://cordis.europa.eu/project/rcn/211630_en.html	764786	no	no	implicit
QuSCo Quantum-enhanced Sensing via Quantum Control https://cordis.europa.eu/project/rcn/211737_en.html	765267	no	no	implicit
READ Recognition and Enrichment of Archival Documents http://cordis.europa.eu/project/rcn/198756_en.html	674943	no	no	obvious
REProMag Resource Efficient Production Route for Rare Earth Magnets http://cordis.europa.eu/project/rcn/193433_en.html	636881	no	no	implicit

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
RETRAINER "REaching and grasping Training based on Robotic hybrid Asslstance for Neurological patients: End users Real life evaluation" http://cordis.europa.eu/project/rcn/194238_en.html	644721	no	no	obvious
RockEU2 Robotics Coordination Action for Europe Two http://cordis.europa.eu/project/rcn/199873_en.html	688441	no	no	implicit
SAFERUP https://cordis.europa.eu/project/rcn/211745_en.html	765057	no	yes	-
SAGE-CPSoC Self-Aware CPSSoCs with Hierarchical Goal Management http://cordis.europa.eu/project/rcn/201349_en.html	705617	no	no	no
Semi40 Power Semiconductor and Electronics Manufacturing 4.0 http://cordis.europa.eu/project/rcn/203398_en.html	692466	no	no	implicit
SET-Nav "Navigating the Roadmap for Clean, Secure and Efficient Energy Innovation" http://cordis.europa.eu/project/rcn/200842_en.html	691843	no	no	implicit
SFSysCellBio Slow-Fast Systems in Cellular Biology http://cordis.europa.eu/project/rcn/198667_en.html	661650	no	no	no
SPM2.0 Scanning probe microscopies for nanoscale fast, tomographic and composition imaging http://cordis.europa.eu/project/rcn/205536_en.html	721874	no	no	implicit

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
STILORMADE Highly efficient non-standard solar modules manufactured through an automated, reconfigurable mass production processes delivering 30% reduction in costs http://cordis.europa.eu/project/rcn/207637_en.html	737884	no	no	implicit
SUNRISE Sustainable Urban Neighbourhoods - Research and Implementation Support in Europe https://cordis.europa.eu/project/rcn/210136_en.html	723365	no	yes	-
SUPERAID7 Stability Under Process Variability for Advanced Interconnects and Devices Beyond 7 nm node http://cordis.europa.eu/project/rcn/199176_en.html	688101	no	no	no
sustainablySMART Sustainable Smart Mobile Devices Lifecycles through Advanced Re-design, Reliability, and Re-use and Remanufacturing Technologies http://cordis.europa.eu/project/rcn/198769_en.html	680604	no	no	implicit
switchBoard In the eye of the observer: Visual processing at the heart of the retina http://cordis.europa.eu/project/rcn/198501_en.html	674901	no	no	no
SYM CAR Symbolic Computation and Automated Reasoning for Program Analysis http://cordis.europa.eu/project/rcn/197841_en.html	639270	no	no	no
SYSMICS Syntax Meets Semantics: Methods, Interactions, and Connections in Substructural logics. http://cordis.europa.eu/project/rcn/199888_en.html	689176	no	no	implicit

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
SYSTEM-RISK A Large-Scale Systems Approach to Flood Risk Assessment and Management http://cordis.europa.eu/project/rcn/198112_en.html	676027	no	no	implicit
TEAM Technology-Enabled Mental health for Young People http://cordis.europa.eu/project/rcn/205548_en.html	722561	no	yes	-
TeraApps Doctoral Training Network in Terahertz Technologies for Imaging, Radar and Communication Applications https://cordis.europa.eu/project/rcn/211522_en.html	765426	no	no	obvious
theONE The Janus-face of the localized carrier in cuprates: Generating the pseudogap and high temperature superconductivity https://cordis.europa.eu/project/rcn/209925_en.html	725521	no	no	no
THIRST Third Strategy in Tissue Engineering – Functional microfabricated multicellular spheroid carriers for tissue engineering and regeneration	772464	No information available		
ToMax Toolless Manufacturing of Complex Structures http://cordis.europa.eu/project/rcn/193185_en.html	633192	no	no	no
TraSaCu Traffic Safety Cultures and the Safe Systems Approach - Towards a Cultural Change Research and Innovation Agenda for Road Safety http://cordis.europa.eu/project/rcn/194361_en.html	645690	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
Tucas Tuneable Catalyst Surfaces for Heterogeneous Catalysis – Electrochemical Switching of Selectivity and Activity https://cordis.europa.eu/project/rcn/211820_en.html	755744	no	no	no
U-Test Testing Cyber-Physical Systems under Uncertainty, Systematic, Extensible, and Configurable Model-based and Search-based Testing Methodologies http://cordis.europa.eu/project/rcn/194326_en.html	645463	no	no	implicit
Volta Innovation in geospatial and 3D data https://cordis.europa.eu/project/rcn/210797_en.html	734687	no	no	obvious
WASTE2FUELS - Phase 1 Sustainable production of next generation biofuels from waste streams http://cordis.europa.eu/project/rcn/200420_en.html	654623	no	no	no
WaterSpy High sensitivity, portable photonic device for pervasive water quality analysis http://cordis.europa.eu/project/rcn/206173_en.html	731778	no	no	no
xSTREAM x-ray-waveforms at the Space-Time Resolution Extreme for Atomic-scale Movies https://cordis.europa.eu/project/rcn/211379_en.html	716950	no	no	no
ZOTERAC Zinc Oxide For TeraHertz Cascade Devices http://cordis.europa.eu/project/rcn/196962_en.html	665107	no	no	no

Table 8: Analysis of H2020 research projects of TUW

Summary

Summarizing the gender analysis of the current H2020 projects at TUW the following table and associated figure show, that more than half of the projects show some possibility to include gender perspective and only 32 projects show none (although it is to mention that also for these projects it would be possible to integrate the gender dimension in some way). 8 projects already contain a gender dimension, whereas 24 research projects show obvious opportunities to include gender issues. 39 research projects show implicit possibilities for the implementation of gender dimensions. For 3 projects there was no information available. Out of 106 analysed projects, 71 research projects showed either an already existing gender content or the possibility for an implementation (63 projects).

Ranking of research projects at TUW (2014-2017)	
Research projects with existing gender content	8
Research projects with obvious possibilities to include gender	24
Research projects with implicit possibilities to include gender	39
Research projects that show no possibilities to include gender	32
Research projects with no further information found	3

Table 9: Ranking of research projects at TUW

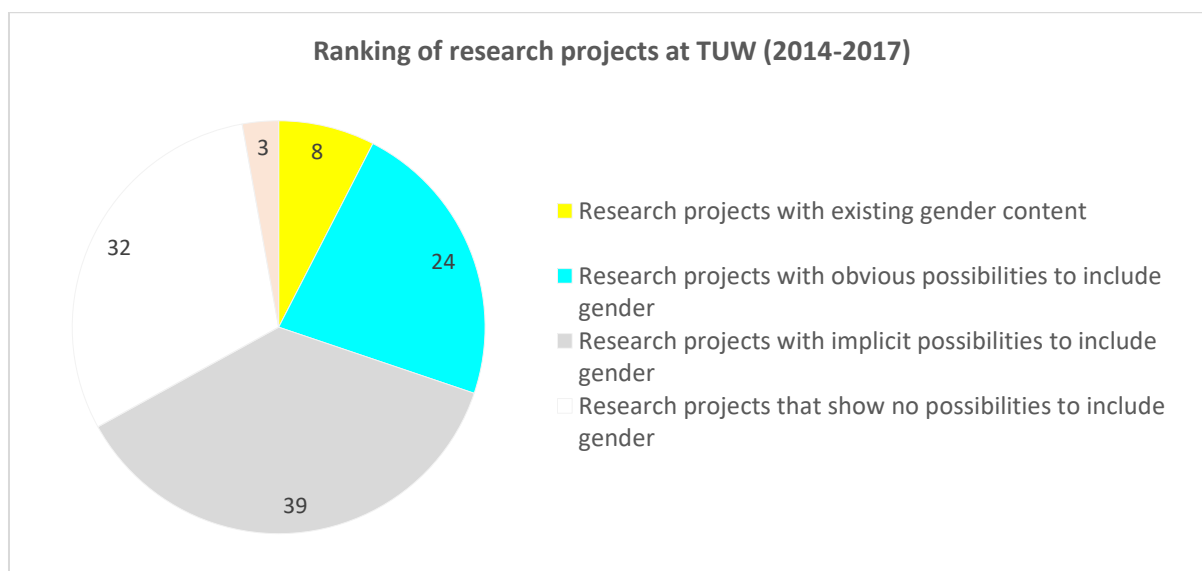


Figure 1: Ranking of research projects at TUW (2014-2017)

The table below lists the research projects at TUW where existing gender contents were found and the research projects that show obvious possibilities to include gender perspectives.

TUW: Research projects showing existing gender content or obvious possibilities to include gender perspectives (2014-2017)		
H2020 Projects	EU Nr.	Ranking
ACROSSING	676157	existing gender content
EoC	732407	existing gender content
ER4STEM	665972	existing gender content
GEECCO	741128	existing gender content
Photo-Emulsion	765341	existing gender content
SAFERUP	765057	existing gender content
SUNRISE	723365	existing gender content
TEAM	722561	existing gender content

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ANSWER	675530	obvious
AnyPLACE	646580	obvious
ARCADES	675789	obvious
AURES	646172	obvious
BRISKEE	649875	obvious
CHEETAH	723716	obvious
E-CAM	676531	obvious
EMMC-CSA	723867	obvious
EN_ACTI2NG	721358	obvious
EWIT	641660	obvious
FACTS4WORKERS	636778	obvious
FAIR Stations	777636	obvious
FaLiCaB	644399	obvious
FLOBOT	645376	obvious
GROW	690199	obvious
HotMaps	723677	obvious
I-REACT	700256	obvious
READ	674943	obvious
RETRAINER	644721	obvious
TeraApps	765426	obvious
TraSaCu	645690	obvious
Volta	734687	obvious
APOLLO	687412	obvious
Ibroad	754045	obvious

Table 10: TUW: research projects showing existing gender content or obvious possibilities to include gender perspectives

Teaching²

Structure of curricula documents

The curricula documents and online course descriptions of TU Vienna are structured as follows and include the following information about the structure and content of the specific study field as well as the courses:

Curricula Structure TUW³	
Document: Curriculum for the Study	
Fundamentals and jurisdiction	
Qualification profile	
Duration and extent	
Admission to Bachelor study/Master study	
Study structure	
Courses	
Study introduction and orientation phase (only Bachelor curriculum)	
Examination regulations	
Studyability and mobility	
Bachelor Thesis/Master Thesis	
Academic degree	
Quality management	
Entry into force	
Transitional provisions	
A. Module description	
B. Course types	
C. Summary of all obligatory requirements	
D. Semester organisation of the courses (only Bachelor Curriculum)	
E. Semester recommendations for lateral entering students (only Bachelor Curriculum)	
Online Course Description	
Properties:	Semester hours Credits Type
Aim of course	
Subject of course	
Additional Information	
Lecturers	
Institute	
Course dates	
Examination modalities	
Exams	
Course registration	
Curricula	
Semester	
Literature	
Previous knowledge	
Miscellaneous	

² Links to the detailed curricula of the chosen studies are attached in the annexe.

³ Links to the detailed curricula of the chosen studies are attached in the annexe.

Language

Table 11: Curricula structure of TUW

Selected fields of study

In collaboration with the vice rector for teaching the following curricula have been selected for an in-depth gender analysis under task 6.1:

Faculty Electrical Engineering

- Bachelor programme Electrical Engineering and Information Technology
- Master programme Embedded Systems
- Master programme Energy Systems and Automation Technology
- Master programme Telecommunications
- Master programme Microelectronics and Photonics

Faculty for mechanical Engineering

- Bachelor programme Mechanical Engineering
- Master programme Mechanical Engineering
- Bachelor programme Mechanical Engineering - Management
- Master programme Mechanical Engineering - Management

Biomedical Engineering

- Master programme Biomedical Engineering

Faculty for Mathematics

- Bachelor programme Technical Mathematics
- Master programme Technical Mathematics
- Bachelor programme Statistics and Mathematics in Economics
- Master programme Statistics and Mathematics in Economics
- Bachelor programme Financial and Actuarial Mathematics
- Master programme Financial and Actuarial Mathematics

The following table shows all the selected fields of study and associated groups of study that will be analysed in the upcoming chapter.

The diagram demonstrates the number of all courses included in the selected studies that were analysed (1326) and the segmentation of courses with an already existing gender content (11), courses with either obvious (157) or implicit (119) possibilities to include gender perspectives and courses that didn't evince existing gender content or chances to implement the gender dimension (1039). Although it is to say, that it would be possible to involve some kind of gender dimension in almost every course and study. In this ranking, courses that occurred in multiple studies were only counted once (not multiple times).

At TUW the particular courses of the module "transferable skills" with a gender existing content or an obvious possibility to include gender perspectives were counted in, because the existing gender content of most studies at TUW was detected within the description and link to this module.

	Field of Study	Group of Study
1	Master Biomedical Engineering	Biomedical Engineering
2	Bachelor Electrical Engineering and Information Technology	Electrical Engineering
3	Master Embedded Systems	Electrical Engineering

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4	Master Microelectronics and Photonics	Electrical Engineering
5	Master Energy Systems and Automation Technology	Energy Engineering
6	Bachelor Technical Mathematics	Mathematics
7	Bachelor Statistics and Mathematics in Economics	Mathematics
8	Bachelor Financial and Actuarial Mathematics	Mathematics
9	Master Technical Mathematics	Mathematics
10	Master Statistics and Mathematics in Economics	Mathematics
11	Master Financial and Actuarial Mathematics	Mathematics
12	Bachelor Mechanical Engineering	Mechanical Engineering
13	Master Mechanical Engineering	Mechanical Engineering
14	Bachelor Mechanical Engineering - Management	Mechanical Engineering
15	Master Mechanical Engineering - Management	Mechanical Engineering
16	Master Telecommunications	Telecommunications
Additional: Transferable Skills Module		

Table 12: Selected fields of study and groups of study at TUW

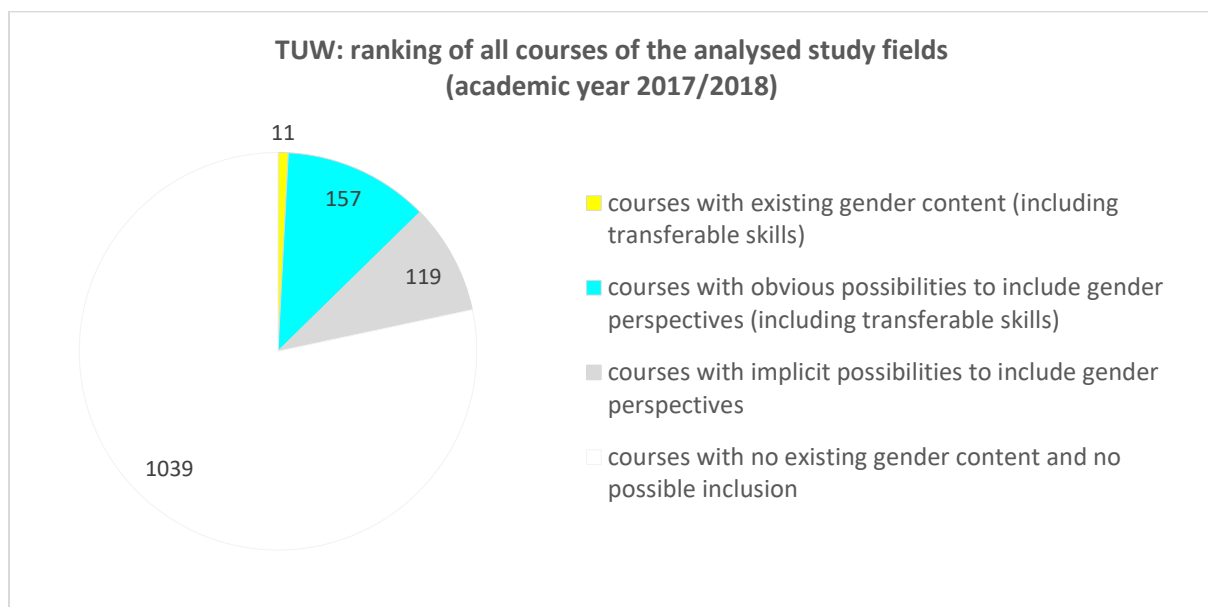


Figure 2: TUW: ranking of all courses of the analysed study fields (academic year 2017/2018)

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Curricula analysis

The table below contains all the selected fields of study from the university (for task 6.1), plus the detected courses of the study fields that either already include gender dimensions within their curricula concept or that would have the potential to involve gender issues in different ways – either obviously or implicit. The list does not include all the courses of the study fields. The courses are categorised with an “x” whether they show an existing content, an obvious possibility or an implicit possibility for a gender dimension implementation. This analysis is based on the curricula of the academic year 2017/2018.

Field of studies	Course	Existing gender content	obvious	implicit
Bachelor Electrical Engineering and Information Technology	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	VO Project Management	x		
	VO Technology and Society	x		
	UE Communication and Presentation		x	
	VO Foundations of Operations and Business Management		x	
	Bachelor Thesis			x
Bachelor Financial and Actuarial Mathematics	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	VO Technology for people for TM		x	
	UE Life and health insurance mathematics		x	
	UE Life insurance mathematics		x	
	VO Life and health insurance mathematics		x	
	VO Life insurance mathematics		x	
	PR Project with bachelor thesis			x
	SE Seminar with seminar paper			x
	UE Introduction to Statistics			x
	UE Measure and Probability Theory 1			x
	UE Measure and Probability Theory 2			x
	VO Insurance business management 1			x
	VO Insurance contract law			x
	VO Insurance supervision law			x
	VO Introduction to Statistics			x
	VO Measure and Probability Theory 1			x
	VO Measure and Probability Theory 2			x
	VU Risk management in finance and insurance			x
	Bachelor Thesis			x
	Bachelor Mechanical Engineering	Various out of the Elective Courses and "Transferable Skills"-Module	x	
Various out of the Module "Group Occupational Field Orientation"			x	
VO Foundations of Operations and Business Management			x	

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Field of studies	Course	Existing gender content	obvious	implicit
	VO Production and Quality Management 1			x
	VO Project Management			x
	VU Operational cost accounting			x
	VU Introduction to the study of mechanical engineering			x
	Bachelor Thesis			x
Bachelor Mechanical Engineering - Management	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	VO Logistics		x	
	VO Macroeconomics for WIMB		x	
	VU Fundamentals of Work Science		x	
	VU Practical application of FE methods		x	
	UE Production and Quality Management 2			x
	VO Business Law			x
	VO Production and Quality Management 1			x
	VO Production and Quality Management 2			x
	VO Project Management			x
	VU Optimization in Business and Economics			x
	Bachelor Thesis			x
	UE Virtual Product Development			x
	VO Design of Machine Tools			x
	VO Fundamentals of Business Management			x
VO Virtual Product Development			x	
Bachelor Statistics and Mathematics in Economics	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	VO Technology for people for TM		x	
	Bachelor Thesis			x
	PR Project with bachelor thesis			x
	SE Seminar with seminar paper			x
	UE Introduction to Statistics			x
	UE Measure and Probability Theory 1			x
	UE Measure and Probability Theory 2			x
	VO Introduction to Statistics			x
	VO Measure and Probability Theory 1			x
	VO Measure and Probability Theory 2			x
	VU Operations Management			x
	VU Optimization practice			x
	VO Measure and Probability Theory x			x

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Field of studies	Course	Existing gender content	obvious	implicit
Bachelor Technical Mathematics	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	VO Technology for people for TM		x	
	Bachelor Thesis			x
	PR Project with bachelor thesis			x
	SE Seminar with seminar paper			x
	UE Introduction to Statistics			x
	UE Measure and Probability Theory 1			x
	UE Measure and Probability Theory 2			x
	UE Modelling and Visualization 1			x
	UE Modelling and Visualization 2			x
	VO Introduction to Statistics			x
	VO Measure and Probability Theory 1			x
	VO Measure and Probability Theory 2			x
	VO Modelling and Visualization 1			x
VO Modelling and Visualization 2			x	
Master Biomedical Engineering	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	VO Assistive Technologies 1		x	
	VO Assistive Technologies 2		x	
	VO Biology		x	
	LU Rehabilitation Engineering		x	
	LU Rehabilitation Engineering		x	
	SE Biomechanics of the Human Locomotor System		x	
	SE Communication and rhetoric		x	
	SE Communication techniques		x	
	SE Didactics in computer science education		x	
	SE Group Dynamics		x	
	SE Leadership Competency Coaching 1		x	
	SE Rehabilitation Engineering		x	
	VO Anatomy and Histology		x	
	VO Cardiovascular System Dynamics		x	
	VO Developing a career - coping with obstacles		x	
	VO Introduction to Philosophy of Science 1		x	
	VO Modelling of the Human Locomotor System		x	
	VO Molecular Biology of the Cell		x	
	VO Physiology and Basics of Pathology		x	
	VO Presentation, Moderation und Mediation		x	

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Field of studies	Course	Existing gender content	obvious	implicit
	VO Theory and Practice of Group Work		x	
	VU Communication and Moderation		x	
	VU Cooperative Work		x	
	VU Engineering sociology and technology psychology		x	
	VU Research Methods		x	
	VU Rhetoric, body language, reasoning training		x	
	VU Softskills for technicians		x	
	VU Techniques of Presentation and Negotiation		x	
	LU Tissue Biomechanics			x
	Master Thesis			x
	SE Tissue Biomechanics			x
	UE Introduction to Digital Image Processing			x
	UE Medical Image Processing			x
	UE Medical Image Processing			x
	UE Presentation, Moderation und Mediation			x
	UE Tissue Biomechanics			x
	VO Brain Modelling			x
	VO Introduction into Biophysics			x
	VO Introduction to Biomaterials and Tissue Engineering			x
	VO Medical Computer Vision			x
	VO Medical Image Processing			x
	VO Medical Physics of Diagnostic Imaging			x
	VO The Motor Muscle			x
	VU French for Engineers I			x
	VU Introduction to Biomechanics			x
	VU Italian for engineers I			x
	VU Russian for engineers II			x
	VU Russian für engineers I			x
	VU Spanish for engineers I			x
	VU Spanish for engineers II			x
	VU Technical English Communication A			x
	VU Technical English Presentation A			x
	VU Technical Restoration of Body Functions by Means of FES			x
	VU Ultrasound in Nature, Engineering and Medicine			x

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Field of studies	Course	Existing gender content	obvious	implicit	
Master Embedded Systems	VO Human-Machine Interaction		x		
	SE User Interfaces Seminar		x		
	SE Communication Networks Seminar		x		
	VU Optimization in Transport and Logistics			x	
	Master Thesis			x	
	UE 3D Vision			x	
	UE Video Processing			x	
	VO Energy Systems and Networks			x	
	VU Machine Vision and Cognitive Robotics			x	
	VU Modeling and Solving Constrained Optimization Problems			x	
	VU Problem Solving and Search in Artificial Intelligence			x	
	SE Emerging Devices			x	
	Master Energy Systems and Automation Technology	Various out of the Elective Courses and "Transferable Skills"-Module	x		
Master Thesis				x	
SE Seminar Energy Industry and Environment				x	
UE 3D Vision				x	
UE Video Processing				x	
VO Energy Systems and Networks				x	
VO Modelling and Methods in Bioprocess Development				x	
VU Energy Economics				x	
VU Energy Industry and Environment Deepening				x	
VU Energy Models and Analysis				x	
VU Machine Vision und Cognitive Robotics				x	
Master Financial and Actuarial Mathematics		Various out of the Elective Courses and "Transferable Skills"-Module	x		
		VO Life and health insurance mathematics		x	
	VU Advanced life insurance mathematics		x		
	Final Exam			x	
	Master Thesis			x	
	VO Social security law			x	
	VU Risk management in finance and insurance			x	
	VU Statistical Methods in Insurance			x	

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Field of studies	Course	Existing gender content	obvious	implicit	
Master Mechanical Engineering	Various out of the Module "General Scientific Education and Interdisciplinary Qualifications"	x			
	VO Automotive Engineering		x		
	VO Rail Vehicle Construction		x		
	VU Practical application of FE methods		x		
	VU Product Lifecycle Management		x		
	VU Teambuilding and Leadership		x		
	LU Rehabilitation Technology		x		
	SE Automotive and the environment		x		
	SE Biomechanics of the human musculoskeletal system		x		
	SE Rehabilitation Technology SE		x		
	VO Modeling of the musculoskeletal system		x		
	VO Prosthetics		x		
	VO Rehabilitation Technique		x		
	LU The engine muscle				x
	Master Thesis				x
	VO Accident Biomechanics				x
	VO The motor muscle				x
	VU Enterprise Risk Management (Fundamentals)				x
VU Technical restoration of bodily functions through functional electrostimulation				x	
Master Mechanical Engineering - Management	Various out of the Module "General Scientific Education and Interdisciplinary Qualifications"	x			
	VO Human Resource Management and Leadership		x		
	SE Ecodesign, Sustainable Product Development		x		
	SE Organization and Strategic Management		x		
	UE Engineering Design and Development of New Products		x		
	UE Human Resource Management and Leadership		x		
	VO Engineering Design and Development of New Products		x		
	VO Quality Management in Service		x		
	VU Managing People and Organizations		x		
	VU Organization Theory		x		

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Field of studies	Course	Existing gender content	obvious	implicit
	VU Product Lifecycle Management		x	
	VU Strategic Management		x	
	VU Teambuilding and Leadership		x	
	LU Rehabilitation Technology		x	
	SE Biomechanics of the Human Locomotor System		x	
	SE Car Design		x	
	SE Rehabilitation Technology		x	
	VO Modelling of the Human Locomotor System		x	
	VO Rehabilitation Technology		x	
	VU Fundamentals of Organization		x	
	Module Project Work			x
	UE Quality Management in Product Development			x
	VO Product Development, Innovation and ECO-Design			x
	VO Quality Management in Product Development			x
	VO Quality Management in Product Development			x
	LU The Motor 'Muscle'			x
	Master Thesis			x
	SE Entrepreneurship and Innovation			x
	SE Logistics Management			x
	SE Quality Management			x
	SE Risk Management			x
	SE Seminar for Master and PhD students			x
	SE Seminar in Car and Environment			x
	UE Higher design theory and product development			x
	UE Virtual Product Development			x
	VO Aircraft Design			x
	VO Applied Process Management			x
	VO Automotive Acoustics and Noise Control			x
	VO Criteria of future automobiles I			x
	VO Criteria of future automobiles II			x
	VO Design of Handling Equipments			x
	VO Environment protection			x
	VO Higher design theory and product development			x
	VO Injury Mechanics			x

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Field of studies	Course	Existing gender content	obvious	implicit
	VO Maintenance and Reliability Management			x
	VO Modern Quality Strategies			x
	VO Product Management			x
	VO The Motor 'Muscle'			x
	VO Virtual Product Development			x
	VU E&I Garage - Business Model Development			x
	VU Enterprise Risk Management - Basics			x
	VU Enterprise Risk Management (Fundamentals)			x
	VU Innovation Management and Marketing			x
	VU Innovation Theory			x
	VU Innovative Building Services			x
	VU International Negotiations			x
	VU Modern Methods in Production Management			x
	VU Project and Process Management			x
	VU Quality Management Tools			x
	VU Risk Model Management			x
	VU Risk-based Performance Management			x
	Master Microelectronics and Photonics	Various out of the Elective Courses and "Transferable Skills"-Module	x	
Master Thesis				x
SE Emerging Devices				x
Master Statistics and Mathematics in Economics	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	Final Exam			x
	Master Thesis			x
	Selected chapters of Econometrics (AKOEK)			x
	Selected chapters of Economics (AKVWL)			x
	Selected chapters of Operations Research (AKOR)			x
	UE Game Theoretic Modelling			x
	VO Game Theoretic Modelling			x
Master Technical Mathematics	Various out of the Elective Courses and "Transferable Skills"-Module	x		
	Final Exam			x
	Master Thesis			x
Master Telecommunications	Various out of the Elective Courses and "Transferable Skills"-Module	x		

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Field of studies	Course	Existing gender content	obvious	implicit
	Master Thesis			x
	SE Seminar Energy Economics and Environment			x
	VU Digital Communications 1			x
	VU Digital Communications 2			x
	VU Energy Economics			x
	VU Energy Management and Environment Deepening			x
	VU Energy Models and Analysis			x

Table 13: Curricula analysis of selected studies at TUW

As the module "Transferable Skills" is included in almost every selected study at TUW and the module description involves a recommendation to select courses which show a gender related content, the curricula analysis at TUW includes that module. The table beneath shows the courses involved in this module, that either already show an existing gender content or obvious possibilities for an implementation of gender dimensions.

Various courses out of the "Transferable Skills"-Module		
Course	Existing gender content	obvious
Technology for People		
VO Impact of technological development - Introduction to the theory and practice of technology assessment (TA)		x
SE Chain saws, codes, robots et al.: Diversity and technology development	x	
VU Technology for People	x	
Gender Awareness		
SE What does gender have to do with technology studies?	x	
VO Technik und Gender, Fundamentals lecture for engineering scientists	x	
VO Developing a career - coping with obstacles	x	
SE puzzles, knowledge, knowledge: the cultural power of the sciences	x	
SE diversity and technology development	x	
Social competencies		
VU Values as Leadership Tool		x
VU Value-based development of organizations		x
VU The Global Agenda - Global Learning		x
VU Softskills for technicians		x
VU Project Team Leadership and Conflict Management		x
VU Management and Leadership		x
VU Leadership Simulation		x
VU Inspirational Leadership in the 21st century		x
VU Basic Skills dealing with organizations		x
VO Creativity Engineering		x
UE Multidisciplinary Planning		x
SE Team-Coaching		x

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Various courses out of the "Transferable Skills"-Module		
Course	Existing gender content	obvious
SE Successful Team Work		x
SE Structured Problem Solving and Negotiation		x
SE Social skills for tutors		x
SE Social Skills		x
SE Rhetorical communication		x
SE Mediativ competence in Civil Engineering Practice 2		x
SE Mediativ competence in Civil Engineering Practice 1		x
SE Leadership Competency Coaching 2		x
SE Leadership Competency Coaching 1		x
SE Group dynamic seminar		x
SE Group Dynamics		x
SE Ecological aspects in building design		x
SE Career Planning and Self-Management		x
SE Accompanying seminar for mentors of the TUW mentoring program		x
PR IT Projects for Youth		x
Media competencies		
VO Presentation, Moderation and Mediation		x
VU Rhetoric body language and training in assertiveness and argumentation		x
VU Negotiation technique and psychology		x
VU How to Illustrate Engineering by Means of Audiovisual Media		x
VU Getting agreement in negotiations		x
VU Applied Environmental Psychology		x
VO Understandable Science Teachings in Children's University		x
VO Presentations II		x
VO Presentations I		x
VO Economics of attention		x
UE Presentation, Moderation and Mediation		x
SE Rhetoric, elocution and means of expression		x
SE Communication techniques		x
SE Elocution with video analysis		x
SE Communication and rhetoric		x
Competencies in law, business and economics		
VO Technology exploitation		x
VU Technology Marketing		x
VU Product Development based on the Example of Robots		x
VU Innovation Lab		x
VU Global Strategy, Markets and Politics		x
VU Entrepreneurship Lab		x
VU Contract and liability law		x
VO Lecture Series Ecology		x
VO Public European and Austrian Economic Law		x

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Various courses out of the "Transferable Skills"-Module		
Course	Existing gender content	obvious
VO Private Law		x
VO Marketing Basics		x
VO Management for civil engineers		x
VO Management and Leadership in Innovative Companies		x
VO Legal issues in ecology		x
VO Intellectual property law		x
VO Industrial property rights for technicians		x
VO Expert law		x
VO European Union - Institutions, Policies and Future Challenges		x
VO European Technology Law		x
VO Entrepreneurship for innovative corporations and high-tech start-ups		x
VO Ecology and Sustainable Development		x
UE Organisational Lab		x
Other competencies		
VU E-Tutoring, Moderation of E-Learning		x
VU Searching prior art based on patent applications		x
VU Further Education and Lifelong Learning		x
VU The TU Talente program for students in master and doctoral studies		x
VU The TU Talente program		x
VU Communicating Science		x
VU Barrierfree Buildings		x
VO Sustainability Challenge		x
VO Relativity for the non-specialist		x
VO Real Estate Management and tenancy		x
VO Planning of IT Projects and Public Procurement Law		x
VO Management questions and automation		x
VO Management of apartments in real property and essential features in the benefits to the public of apartments		x
VO How Science Inspires Science Fiction		x
VO Foundations of scientific work		x
VO Ecological and Social Aspects in Chemistry		x
VO Design for all		x
VO Aspects of Radiation Physical Concepts and Socio-Economic Concepts in Radiation Protection		x
UE Barrierfree Buildings		x
TU Vienna alumni club excursion		x
SE Science and the quest for knowledge		x
SE Mentoring - Mathematics (FaMe)		x
SE Empirical-scientific view, conditions		x
SE Empirical-scientific view		x

Table 14: Various courses out of the "Transferable Skills"-Module at TUW

Summary

The following summary shows the final number of courses regarding the selected studies at TUW with existing gender content, as well as obvious and implicit possibilities to include gender perspectives. The first table and the associated diagram demonstrate that 4 courses out of the selected studies at TUW already include a gender content, 67 courses show obvious possibilities to include gender perspectives and 119 courses show implicit possibilities to include gender perspectives. In this table and figure the courses were counted only once, although some of them appear more often in the analysis for different studies. Out of the module “transferable skills” there were 7 courses accounted for already having a gender related content and 90 courses were found for an obvious opportunity to involve gender dimensions. Tables as well as figure show also the assigned courses out of the “transferable skills”-module because this module is mentioned in almost every selected study at TUW and always includes a recommendation to choose courses with a gender related content. The table after the figure evinces the number of assigned courses according to the selected groups of study at TUW (here courses could be counted in more often).

TUW: Numbers of assigned courses (academic year 2017/2018)	
Courses with existing gender related content	4
Courses with obvious possibilities to include gender perspectives	67
Courses with implicit possibilities to include gender perspectives	119
Transferable skills	
Transferable skills: Courses with existing gender related content	7
Transferable skills: Courses with obvious possibilities to include gender	90

Table 15: TUW: Numbers of assigned courses

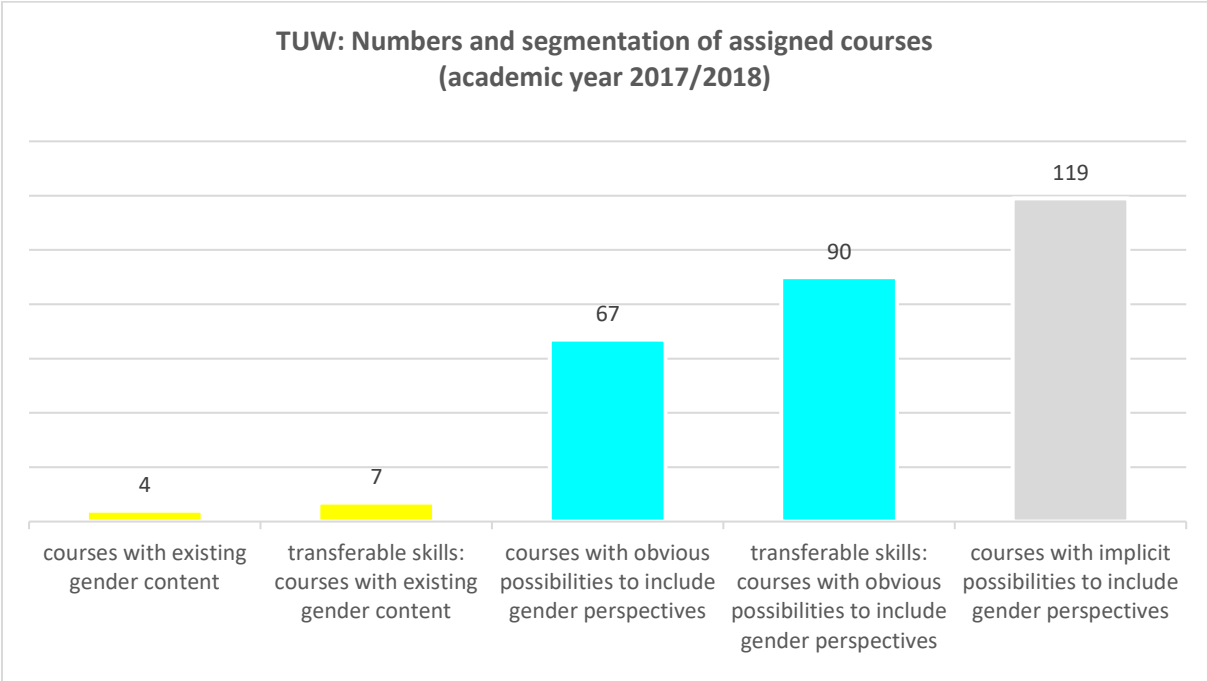


Figure 3: TUW: Numbers and segmentation of assigned courses

TUW: Number of assigned courses by groups of study				
Groups of study	Fields of study	Existing gender content	obvious	implicit
Energy Engineering	Master Energy Systems and Automation Technology	1	0	10
Electrical Engineering	Bachelor Electrical Engineering and Information Technology			
	Master Embedded Systems			
	Master Microelectronics and Photonics	4	5	22
Biomedical Engineering	Master Biomedical Engineering	1	28	26
Mathematics	Bachelor Financial and Actuarial Mathematics			
	Bachelor Statistics and Mathematics in Economics			
	Bachelor Technical Mathematics			
	Master Financial and Actuarial Mathematics			
	Master Statistics and Mathematics in Economics			
	Master Technical Mathematics	6	9	51
Mechanical Engineering	Bachelor Mechanical Engineering			
	Bachelor Mechanical Engineering - Management			
	Master Mechanical Engineering			
	Master Mechanical Engineering - Management	3	19	63
Telecommunications	Master Telecommunications	1	0	7
„Transferable Skills“ Module		7	90	-

Table 16: TUW: Number of assigned courses by groups of study

The further tables contain listings of the actual courses that include gender dimensions and courses that have obvious opportunities to implement the gender perspective into their content. The table at the end reveals the text passages out of the curricula that involve the descriptions of the found gender content. At TUW it is notable that almost all selected studies include the Module Elective Courses and "Transferable Skills", where it is recommended within the curricula to choose courses which focus on gender mainstreaming and diversity management as well as women's and gender studies. Therefore, the relevant courses out of the "transferable skills"-module are included in the following section.

TUW: List of courses with existing gender content
Various out of the Elective Courses and "Transferable Skills"-Module
Various out of the Module "General Scientific Education and Interdisciplinary Qualifications"
VO Project Management
VO Technology and Society
Transferable skills
SE Chain saws, codes, robots et al.: Diversity and technology development
VU Technology for People
SE What does gender have to do with technology studies?
VO Technik und Gender, Fundamentals lecture for engineering scientists
VO Developing a career - coping with obstacles
SE puzzles, knowledge, knowledge: the cultural power of the sciences
SE diversity and technology development

Table 17: TUW: List of courses with existing gender content

TUW: List of courses with obvious possibilities to include gender perspectives
LU Rehabilitation Engineering
LU Rehabilitation Technology
SE Automotive and the environment
SE Biomechanics of the Human Locomotor System
SE Biomechanics of the human musculoskeletal system
SE Car Design
SE Communication and rhetoric
SE Communication Networks Seminar
SE Communication techniques
SE Didactics in computer science education
SE Ecodesign, Sustainable Product Development
SE Group Dynamics
SE Leadership Competency Coaching 1
SE Organization and Strategic Management
SE Rehabilitation Engineering
SE Rehabilitation Technology
SE User Interfaces Seminar
UE Communication and Presentation
UE Engineering Design and Development of New Products
UE Human Resource Management and Leadership
UE Life and health insurance mathematics
UE Life insurance mathematics
Various out of the Module "Group Occupational Field Orientation"
VO Anatomy and Histology
VO Assistive Technologies 1
VO Assistive Technologies 2
VO Automotive Engineering
VO Biology
VO Cardiovascular System Dynamics

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VO Developing a career - coping with obstacles
VO Engineering Design and Development of New Products
VO Foundations of Operations and Business Management
VO Human Resource Management and Leadership
VO Human-Machine Interaction
VO Introduction to Philosophy of Science 1
VO Life and health insurance mathematics
VO Life insurance mathematics
VO Logistics
VO Macroeconomics for WIMB
VO Modelling of the musculoskeletal system
VO Modelling of the Human Locomotor System
VO Molecular Biology of the Cell
VO Physiology and Basics of Pathology
VO Presentation, Moderation und Mediation
VO Prosthetics
VO Quality Management in Service
VO Rail Vehicle Construction
VO Rehabilitation Technique
VO Rehabilitation Technology
VO Technology for people for TM
VO Theory and Practice of Group Work
VU Advanced life insurance mathematics
VU Communication and Moderation
VU Cooperative Work
VU Engineering sociology and technology psychology
VU Fundamentals of Organization
VU Fundamentals of Work Science
VU Managing People and Organizations
VU Organization Theory
VU Practical application of FE methods
VU Product Lifecycle Management
VU Research Methods
VU Rhetoric, body language, reasoning training
VU Softskills for technicians
VU Strategic Management
VU Teambuilding and Leadership
VU Techniques of Presentation and Negotiation
Transferable skills
VO Impact of technological development - Introduction to the theory and practice of technology assessment (TA)
VU Values as Leadership Tool
VU Value-based development of organizations
VU The Global Agenda - Global Learning
VU Softskills for technicians

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VU Project Team Leadership and Conflict Management
VU Management and Leadership
VU Leadership Simulation
VU Inspirational Leadership in the 21st century
VU Basic Skills dealing with organizations
VO Creativity Engineering
UE Multidisciplinary Planning
SE Team-Coaching
SE Successful Team Work
SE Structured Problem Solving and Negotiation
SE Social skills for tutors
SE Social Skills
SE Rhetorical communication
SE Mediativ competence in Civil Engineering Practice 2
SE Mediativ competence in Civil Engineering Practice 1
SE Leadership Competency Coaching 2
SE Leadership Competency Coaching 1
SE Group dynamic seminar
SE Group Dynamics
SE Ecological aspects in building design
SE Career Planning and Self-Management
SE Accompanying seminar for mentors of the TUW mentoring program
PR IT Projects for Youth
VO Presentation, Moderation and Mediation
VU Rhetoric body language and training in assertiveness and argumentation
VU Negotiation technique and psychology
VU How to Illustrate Engineering by Means of Audiovisual Media
VU Getting agreement in negotiations
VU Applied Environmental Psychology
VO Understandable Science Teachings in Children's University
VO Presentations II
VO Presentations I
VO Economics of attention
UE Presentation, Moderation and Mediation
SE Rhetoric, elocution and means of expression
SE Communication techniques
SE Elocution with video analysis
SE Communication and rhetoric
VO Technology exploitation
VU Technology Marketing
VU Product Development based on the Example of Robots
VU Innovation Lab
VU Global Strategy, Markets and Politics
VU Entrepreneurship Lab
VU Contract and liability law

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VO Lecture Series Ecology
VO Public European and Austrian Economic Law
VO Private Law
VO Marketing Basics
VO Management for civil engineers
VO Management and Leadership in Innovative Companies
VO Legal issues in ecology
VO Intellectual property law
VO Industrial property rights for technicians
VO Expert law
VO European Union - Institutions, Policies and Future Challenges
VO European Technology Law
VO Entrepreneurship for innovative corporations and high-tech start-ups
VO Ecology and Sustainable Development
UE Organisational Lab
VU E-Tutoring, Moderation of E-Learning
VU Searching prior art based on patent applications
VU Further Education and Lifelong Learning
VU The TU Talente program for students in master and doctoral studies
VU The TU Talente program
VU Communicating Science
VU Barrierfree Buildings
VO Sustainability Challenge
VO Relativity for the non-specialist
VO Real Estate Management and tenancy
VO Planning of IT Projects and Public Procurement Law
VO Management questions and automation
VO Management of apartments in real property and essential features in the benefits to the public of apartments
VO How Science Inspires Science Fiction
VO Foundations of scientific work
VO Ecological and Social Aspects in Chemistry
VO Design for all
VO Aspects of Radiation Physical Concepts and Socio-Economic Concepts in Radiation Protection
UE Barrierfree Buildings
TU Vienna alumni club excursion
SE Science and the quest for knowledge
SE Mentoring - Mathematics (FaMe)
SE Empirical-scientific view, conditions
SE Empirical-scientific view

Table 18: TUW: List of courses with obvious possibilities to include gender perspectives

TUW: Text passages of courses with existing gender content	
Various out of the Elective Courses and "Transferable Skills"-Module	<p>This module serves to deepen the subject as well as to acquire non-specialist knowledge, skills and competences, in particular on technology assessment, engineering genesis, history of technology, scientific ethics, gender mainstreaming and diversity management.</p> <p>The courses of the free choice (module "free electives") serve the deepening of the subject as well as the acquisition of extra-technical knowledge, abilities and competences. It is recommended to select at least one course with scientific and/or methodological content in relation to women's and gender studies within the scope of these courses.</p>
Various out of the Module "General Scientific Education and Interdisciplinary Qualifications"	<p>In the context of this module, the student chooses individual courses of mechanical engineering or other fields of study according to the criteria listed below. The module serves the deepening of the subject and the acquisition of non-specialist knowledge, skills and competences. In particular, it is recommended to acquire foreign language skills within this module and to complete courses on gender-relevant topics.</p>
Modul 16: Technology and Management: VO Project Management VO Technology and Society	<p>The module Technology and Management conveys professional and methodical knowledge, which allows a critical questioning of socially relevant topics in the field of electrical engineering and information technology taking into account gender-related and ethical aspects, as well as a basic understanding of technology assessment. Furthermore, interactive methods of cooperation, team leadership and crisis management are taught in the creation and implementation of projects.</p>
Transferable skills	
SE Chain saws, codes, robots et al.: Diversity and technology development	<p>In the course, personal experiences, theoretical findings and results from research projects are brought together in order to gain a gain in knowledge and reflection that supports one's own professional practice in dealing with diversity. The course is therefore oriented in the processing of the questions strongly to the respective professional interests and fields of action of the participants.</p> <p>The LV discusses the interaction between diversity relations and technological developments on the basis of concrete technical artefacts and basic texts of queer-feminist science and technology research (STS). Among other things, the following questions are investigated: How do ideas and myths influence the technical design of devices, tools and other technical artifacts? What does this mean for appropriation and usage by - potential - users? Which interactions between social and technological developments can be identified? What do these mean for your own professional field and your own professional activities? Where do you find your own decision and creative freedom for the transformation of techno-social conditions? The students work on concrete technological artefacts.</p>

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<p>VU Technology for People</p>	<p>“Technology, Gender & Ethics”: Students learn to critically reflect their own scientific practice and consider taking responsibility. The objective is for students to be able to recognize and define values and norms existing in technologies in engineering and natural sciences as well as in daily scientific practise. In addition, the students will be made acquainted with the requirements and ideals of the TU Vienna regarding “good scientific practice”.</p>
<p>SE What does gender have to do with technology studies?</p>	<p>The lecture gives an overview about the categories sex and gender focussing on science and technology. The course points out the following three perspectives:</p> <ul style="list-style-type: none"> • Women in science and technology: structural and symbolic barriers for women in the field of science and technology, with provided answers and strategies • Science and technology of gender: analysis of the social, historical, political and cultural processes of doing gender in technological artefacts • Gender in science and technology: analysis of the critical role of gender in the exchange between science and society, in developing theories, methods, interpretation of results <p>Introduction to the debates and current research questions in the field gender and STEM (Science, Technology, Engineering and Mathematics). Self-reflection on societal phenonmon and structures; images and stereotypes of engineers; situation of women and men in the STEM-field (at universities as well as in research institutions and companies). Within the course gender sensitive methods and didactics will be applied.</p>
<p>VO Technology and Gender, Basic lecture for engineering scientists</p>	<p>Imparting an overview of the topic of technology and gender: The students should be able to produce references to their own discipline after the course. The relevance of the category gender in technology is made visible and visible in and by the course at different levels. The lecture provides an overview of the current state of the debate on gender in engineering. On the basis of selected examples, central research fields will be discussed as examples and will approach the topic from three angles:</p> <ul style="list-style-type: none"> • "Women in Science and Technology": structural and symbolic barriers for women in these disciplines, solutions for entry and qualification. • "Science and Technology of Gender": Production and Determination of Gender and Gender Differences in Technological Artifacts • "Gender in Science and Technology": meta-analytical approaches to research practice and methodology of engineering sciences, mechanisms of gendering in technical knowledge interests, theory building, methods, interpretation of results and research practices.

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VO Developing a career - coping with obstacles	Identify gendered aspects of careers in computing and develop strategies.
SE puzzles, knowledge, knowledge: the cultural power of the sciences	No information available.
SE diversity and technology development	No information available.

Table 19: TUV: Text passages of courses with existing gender content

In-depth analysis of UPC

The following chapter shows the results and outcomes of the in-depth gender analysis regarding research and teaching, based on current H2020 projects and selected curricula and courses. The sources used for the analysis, such as a list of current H2020 funded projects and a selection of curricula was provided by the RPO-partner. As for the analysis of the curricula the English version of the RPO's website was used a data source. The analysis points out where gender content is already included, and which courses or projects show possibilities for an involvement of the gender dimension. Therefore, the chapter is divided into 1) Research and 2) Teaching. The analysis was carried out according to the methodology, described in the respective chapter.

Research

The following table shows all research projects of UPC, granted under H2020 in a period from 2014 to 2017. (Nota bene: one project "DEBBIE" started in 2018.) Furthermore, the table categorises it regarding to the detected gender related contents and possibilities to include gender perspectives.

The table shows a broad variety and number (108) of different H2020 research projects that have been analysed at UPC: 14 H2020 research projects already show some kind of gender perspective within their content and a broad range of projects show possibilities (either obvious or implicit) to implement the gender dimension. Some of the projects are marked with no gender related content and no possibility to include gender perspectives. Though it is to mention that in all the research projects it would be possible to consider the gender dimension in some way.

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
5G Wireless Innovative Architectures, Wireless Technologies and Tools for High Capacity and Sustainable 5G Ultra-Dense Cellular Networks http://cordis.europa.eu/project/rcn/193871_en.html	641985	no	no	implicit
CASPER User-centric Middleware Architecture for Advanced Service Provisioning in Future Networks http://cordis.europa.eu/project/rcn/194318_en.html	645393	no	no	obvious
OptimOre Increasing yield on Tungsten and Tantalum ore production by means of advanced and flexible control on crushing, milling and separation process http://cordis.europa.eu/project/rcn/193894_en.html	642201	no	no	implicit

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
TRUSS Training in Reducing Uncertainty in Structural Safety http://cordis.europa.eu/project/rcn/193916_en.html	642453	no	no	implicit
VITAL The Vitality of Disease - Quality of Life in the Making http://cordis.europa.eu/project/rcn/196787_en.html	639275	no	yes	-
E-KNOT E-GNSS Knowledge Triangle http://cordis.europa.eu/project/rcn/193829_en.html	641529	no	no	no
GEO-RAMP Geohazards: Risk Assessment, Mitigation and Prevention http://cordis.europa.eu/project/rcn/194352_en.html	645665	no	no	implicit
R4E Roadmaps for Energy http://cordis.europa.eu/project/rcn/194577_en.html	649397	no	no	obvious
WOMEN-UP Cost effective self-management of urinary incontinence addressed to women across Europe http://cordis.europa.eu/project/rcn/194074_en.html	643535	yes (?)	yes	-
GRACeFUL Global systems Rapid Assessment tools through Constraint FUnctional Languages http://cordis.europa.eu/project/rcn/193766_en.html	640954	no	no	implicit
CREATe-Network Processing and Characterization of Advanced Nano-Composites for Resource-efficient Applications and Technologies http://cordis.europa.eu/project/rcn/194130_en.html	644013	no	no	implicit

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
AEROARMS Aerial RObotic system integrating multiple ARMS and advanced manipulation capabilities for inspection and maintenance http://cordis.europa.eu/project/rcn/196623_en.html	644271	no	no	implicit
EMPOWER EMPOWERING a reduction in use of conventionally fueled vehicles using Positive Policy Measures. http://cordis.europa.eu/project/rcn/193389_en.html	636249	no	yes	-
SECURECHAIN Securing future-proof environmentally compatible bioenergy chains http://cordis.europa.eu/project/rcn/194442_en.html	646457	no	no	implicit
SOMATCH Support IT solution for creative fashion designers by integrated software systems to collect, define and visualize textile and clothing trends through innovative image analysis from open data http://cordis.europa.eu/project/rcn/196627_en.html	644859	no	yes	-
EnerGAware Energy Game for Awareness of energy efficiency in social housing communities http://cordis.europa.eu/project/rcn/194601_en.html	649673	no	yes	-
ACTRIS-2 Aerosols, Clouds, and Trace gases Research InfraStructure http://cordis.europa.eu/project/rcn/194931_en.html	654109	no	no	implicit
JERICO-NEXT Joint European Research Infrastructure network for Coastal Observatory – Novel European eXpertise for coastal observaTories http://cordis.europa.eu/project/rcn/194965_en.html	654410	no	no	no

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
AUTAR A Unified Theory of Algorithmic Relaxations http://cordis.europa.eu/project/rcn/196864_en.html	648276	no	no	no
SUPERSEDE SUpporting evolution and adaptation of PERsonalized Software by Exploiting contextual Data and End-user feedback http://cordis.europa.eu/project/rcn/194133_en.html	644018	no	yes	-
IT2RAIL INFORMATION TECHNOLOGIES FOR SHIFT TO RAIL http://cordis.europa.eu/project/rcn/193373_en.html	636078	no	no	implicit
RED-Heat-to-Power Conversion of Low Grade Heat to Power through closed loop Reverse Electro-Dialysis http://cordis.europa.eu/project/rcn/193740_en.html	640667	no	no	implicit
SOTERIA Safe long term operation of light water reactors based on improved understanding of radiation effects in nuclear structural materials http://cordis.europa.eu/project/rcn/196910_en.html	661913	no	no	no
BELS Building European Links toward South East Asia in the field of GNSS http://cordis.europa.eu/project/rcn/197078_en.html	636853	no	no	no
CIRCLE Coordinating European Research on Molecular Communications http://cordis.europa.eu/project/rcn/196978_en.html	665564	no	no	implicit
SESAME Sustainable routes for Smart photonic Materials http://cordis.europa.eu/project/rcn/193624_en.html	639088	no	no	no

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
HYDRALAB-PLUS HYDRALAB+ Adapting to climate change http://cordis.europa.eu/project/rcn/198466_en.html	654110	no	no	implicit
SHAREBOX Secure Management Platform for Shared Process Resources http://cordis.europa.eu/project/rcn/198388_en.html	680843	no	no	implicit
SuPER-W Sustainable Product, Energy and Resource Recovery from Wastewater http://cordis.europa.eu/project/rcn/198318_en.html	676070	no	no	implicit
INCITE Innovative controls for renewable sources Integration into smart energy systems http://cordis.europa.eu/project/rcn/198282_en.html	675318	no	no	obvious
AdMoRe Empowered decision-making in simulation-based engineering: Advanced Model Reduction for real-time, inverse and optimization in industrial problems http://cordis.europa.eu/project/rcn/198314_en.html	675919	no	no	implicit
BE-OPTICAL Advanced BioMedical OPTICAL Imaging and Data Analysis http://cordis.europa.eu/project/rcn/198294_en.html	675512	no	no	implicit
5G-AURA Application-aware User-centric Programmable Architectures for 5G Multi-tenant Networks http://cordis.europa.eu/project/rcn/198311_en.html	75806	no	no	implicit
SKHINCAPS SKin Healthcare by Innovative NanoCAPsuleS http://cordis.europa.eu/project/rcn/198811_en.html	685909	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
MALET Development of MODELICA Libraries for ECS and Thermal management architectures http://cordis.europa.eu/project/rcn/200828_en.html	686783	no	no	no
BIG IoT BIG IoT - Bridging the Interoperability Gap of the Internet of Things http://cordis.europa.eu/project/rcn/200833_en.html	688038	no	no	implicit
netCommons network infrastructure as commons http://cordis.europa.eu/project/rcn/199879_en.html	88768	no	no	obvious
CAPTOR Collective Awareness Platform for Tropospheric Ozone Pollution http://cordis.europa.eu/project/rcn/199118_en.html	688110	no	yes	-
Blue Nodules Breakthrough Solutions for the Sustainable Harvesting and Processing of Deep Sea Polymetallic Nodules http://cordis.europa.eu/project/rcn/199883_en.html	688975	no	no	no
ONION Operational Network of Individual Observation Nodes http://cordis.europa.eu/project/rcn/199272_en.html	687490	no	no	implicit
CAREGIVERSPRO-MMD Self-management interventions and mutual assistance community services, helping patients with dementia and caregivers connect with others for evaluation, support and inspiration to improve the care experience http://cordis.europa.eu/project/rcn/199907_en.html	690211	no	yes	-

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
AUDITOR Advanced Multi-Constellation EGNSS Augmentation and Monitoring Network and its Application in Precision Agriculture http://cordis.europa.eu/project/rcn/199301_en.html	687367	no	no	no
FOWARIM FOSTERING WATER-AGRICULTURE RESEARCH AND INNOVATION IN MALTA http://cordis.europa.eu/project/rcn/200393_en.html	692162	no	no	implicit
MIROR Methods in Research on Research http://cordis.europa.eu/project/rcn/200382_en.html	676207	no	yes	-
ANNETTE Advanced Networking for Nuclear Education and Training and Transfer of Expertise http://cordis.europa.eu/project/rcn/199503_en.html	661910	no	no	implicit
EUROFUSION Implementation of activities described in the Roadmap to Fusion during Horizon 2020 through a Joint programme of the members of the EUROfusion consortium http://cordis.europa.eu/project/rcn/193159_en.html	633053	no	no	no
EMSODEV EMSO implementation and operation: DEVELOPMENT of instrument module http://cordis.europa.eu/project/rcn/197997_en.html	676555	no	no	implicit
LOGIMATIC Tight integration of EGNSS and on-board sensors for port vehicle automation http://cordis.europa.eu/project/rcn/200296_en.html	687534	no	no	implicit
FLEXOCOMP Enabling flexoelectric engineering through modeling and computation http://cordis.europa.eu/project/rcn/202563_en.html	679451	no	no	no

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
SCAVENGE Sustainable Cellular networks harVEStiNG ambient Energy http://cordis.europa.eu/project/rcn/200285_en.html	675891	no	no	implicit
R-WAKE Wake Vortex simulation and analysis to enhance en-route separation management in Europe http://cordis.europa.eu/project/rcn/200856_en.html	699247	no	no	implicit
APACHE Assessment of Performance in current ATM operations and of new Concepts of operations for its Holistic Enhancement http://cordis.europa.eu/project/rcn/203291_en.html	699338	no	no	no
DEPURGAN Swine-farm revolution http://cordis.europa.eu/project/rcn/197962_en.html	673771	no	no	implicit
5G-XHaul Dynamically Reconfigurable Optical-Wireless Backhaul/Fronthaul with Cognitive Control Plane for Small Cells and Cloud-RANs http://cordis.europa.eu/project/rcn/197339_en.html	671551	no	no	implicit
BSD Euler systems and the conjectures of Birch and Swinnerton-Dyer, Bloch and Kato http://cordis.europa.eu/project/rcn/204736_en.html	682152	no	no	no
EpiMech Epithelial cell sheets as engineering materials: mechanics, resilience and malleability http://cordis.europa.eu/project/rcn/204121_en.html	681434	no	no	no
INCOVER Innovative Eco-Technologies for Resource Recovery from Wastewater http://cordis.europa.eu/project/rcn/203262_en.html	689242	no	no	implicit

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
CIPSEC Enhancing Critical Infrastructure Protection with innovative SECURITY framework http://cordis.europa.eu/project/rcn/202692_en.html	700378	no	no	implicit
ANYWHERE EnhANCing emergencY management and response to extreme WeaTHER and climate Events http://cordis.europa.eu/project/rcn/203293_en.html	700099	no	no	obvious
IGATO The introduction of the glaze in al-Andalus: technological waves and Oriental influences http://cordis.europa.eu/project/rcn/201005_en.html	702019	no	no	obvious
SAINT Science and Innovation with thunderstorms http://cordis.europa.eu/project/rcn/205435_en.html	722337	no	no	no
EUNADICS-AV European Natural Airborne Disaster Information and Coordination System for Aviation http://cordis.europa.eu/project/rcn/205812_en.html	723986	no	no	no
CEASELESS Copernicus Evolution and Applications with Sentinel Enhancements and Land Effluents for Shores and Seas http://cordis.europa.eu/project/rcn/206104_en.html	730030	no	no	implicit
INVADE Smart system of renewable energy storage based on INtegrated EVs and bAtteries to empower mobile, Distributed and centralised Energy storage in the distribution grid http://cordis.europa.eu/project/rcn/206504_en.html	731148	no	no	obvious

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
mF2C Towards an Open, Secure, Decentralized and Coordinated Fog-to-Cloud Management Ecosystem http://cordis.europa.eu/project/rcn/206164_en.html	730929	no	no	implicit
LightKone Lightweight Computation for Networks at the Edge http://cordis.europa.eu/project/rcn/206366_en.html	732505	no	no	no
Morpheus MORPHotype EcOSystem – design remote definition based on big data morphology and use ecosystem for creative industries http://cordis.europa.eu/project/rcn/206363_en.html	732399	no	no	obvious
Q-RAPIDS Quality-Aware Rapid Software Development http://cordis.europa.eu/project/rcn/205940_en.html	732253	no	no	no
OPENREQ Intelligent Recommendation Decision Technologies for Community-Driven Requirements Engineering http://cordis.europa.eu/project/rcn/206364_en.html	732463	no	yes	-
MECHANO-CONTROL Mechanical control of biological function http://cordis.europa.eu/project/rcn/207023_en.html	731957	no	no	implicit
PROTECT Pre-commercial lines for production of surface nanostructured antimicrobial and anti-biofilm textiles, medical devices and water treatment membranes http://cordis.europa.eu/project/rcn/207406_en.html	720851	no	no	no

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H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
EMSO-Link Implementation of the Strategy to Ensure the EMSO ERIC's Long-term Sustainability http://cordis.europa.eu/project/rcn/207911_en.html	731036	no	no	no
APACHE Atmospheric Pressure pAsma meets biomaterials for bone Cancer Healing http://cordis.europa.eu/project/rcn/209126_en.html	14793	no	no	no
AMITIE Additive Manufacturing Initiative for Transnational Innovation in Europe http://cordis.europa.eu/project/rcn/207452_en.html	734342	no	no	implicit
CONNECT Combinatorics of Networks and Computation http://cordis.europa.eu/project/rcn/207071_en.html	734922	no	yes	-
INN-BALANCE INNovative Cost Improvements for BALANCE of Plant Components of Automotive PEMFC Systems http://cordis.europa.eu/project/rcn/207648_en.html	735969	no	no	implicit
BACCO Burning on Accreting Compact Objects http://cordis.europa.eu/project/rcn/207302_en.html	702638	no	no	no
ACTRIS PPP ACTRIS PPP - Aerosols, Clouds and Trace gases Preparatory Phase Project http://cordis.europa.eu/project/rcn/207689_en.html	739530	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
DANUBIUS-PP PREPARATORY PHASE FOR THE PAN-EUROPEAN RESEARCH INFRASTRUCTURE DANUBIUS-RI "THE INTERNATIONAL CENTRE FOR ADVANCED STUDIES ON RIVER-SEA SYSTEMS http://cordis.europa.eu/project/rcn/207640_en.html	739562	no	no	implicit
EuroPho21 Implementing the European Photonics21 PPP strategy http://cordis.europa.eu/project/rcn/194126_en.html	643995	no	no	implicit
VISORSURF VisorSurf - A Hardware Platform for Software-driven Functional Metasurfaces http://cordis.europa.eu/project/rcn/207244_en.html	736876	no	no	no
DISCOVERER DISCOVERER – DISruptive teChnOlogies for VERy low Earth oRbit platforms http://cordis.europa.eu/project/rcn/207477_en.html	737183	no	no	no
PAPERCHAIN New market niches for the Pulp and Paper Industry waste based on circular economy approaches http://cordis.europa.eu/project/rcn/210515_en.html	730305	no	no	implicit
ECOBULK Circular Process for Eco-Designed Bulky Products and Internal Car Parts http://cordis.europa.eu/project/rcn/210181_en.html	730456	no	no	obvious
GEECCO Gender Equality in Engineering through Communication and Commitment http://cordis.europa.eu/project/rcn/210240_en.html	741128	yes	yes	-

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
AEMS-IdFit Aircraft Electrical Model Simulation Identification and Fitting Toolbox http://cordis.europa.eu/project/rcn/211034_en.html	755332	no	no	no
MULTIECS MULTIvariable Environmental Control System http://cordis.europa.eu/project/rcn/211041_en.html	755517	no	no	no
ICOPE Innovative COoling system for embedded Power Electronics http://cordis.europa.eu/project/rcn/211044_en.html	755556	no	no	no
DEBBIE A database of experimental biomaterials and their biological effect http://cordis.europa.eu/project/rcn/209352_en.html	751277	no	no	implicit
TREASURE DIVERSITY OF LOCAL PIG BREEDS AND PRODUCTION SYSTEMS FOR HIGH QUALITY TRADITIONAL PRODUCTS AND SUSTAINABLE PORK CHAINS http://cordis.europa.eu/project/rcn/193290_en.html	634476	no	no	obvious
MInD Designing for People with Dementia: designing for mindful self-empowerment and social engagement http://cordis.europa.eu/project/rcn/199934_en.html	691001	no	yes	-
Beacon Bentonite mechanical evolution http://cordis.europa.eu/project/rcn/210819_en.html	745942	no	no	no
M4F MULTISCALE MODELLING FOR FUSION AND FISSION MATERIALS http://cordis.europa.eu/project/rcn/210830_en.html	755039	no	no	no

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
MEDIRAD Implications of Medical Low Dose Radiation Exposure http://cordis.europa.eu/project/rcn/211042_en.html	755523	no	no	obvious
CORUS Concept of Operations for European UTM Systems http://cordis.europa.eu/project/rcn/211096_en.html	763551	no	no	obvious
DISCO Modern spent fuel dissolution and chemistry in failed container conditions http://cordis.europa.eu/project/rcn/210837_en.html	755443	no	no	no
5G ESSENCE Embedded Network Services for 5G Experiences http://cordis.europa.eu/project/rcn/211072_en.html	761592	no	no	implicit
METRO-HAUL METRO High bandwidth, 5G Application-aware optical network, with edge storage, compUte and low Latency http://cordis.europa.eu/project/rcn/211077_en.html	761727	no	no	no
SLICENET End-to-End Cognitive Network Slicing and Slice Management Framework in Virtualised Multi-Domain, Multi-Tenant 5G Networks http://cordis.europa.eu/project/rcn/211081_en.html	761913	no	no	no
TETRAMAX TEchnology TRAnsfer via Multinational Application eXperiments http://cordis.europa.eu/project/rcn/211058_en.html	761349	no	no	no
5G-PICTURE 5G Programmable Infrastructure Converging disaggregated neTwork and compUte Resources http://cordis.europa.eu/project/rcn/211091_en.html	762057	no	no	implicit

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
InnoDC Innovative tools for offshore wind and DC grids http://cordis.europa.eu/project/rcn/211663_en.html	765585	no	no	implicit
Onfire Future Optical Networks for Innovation, Research and Experimentation http://cordis.europa.eu/project/rcn/211709_en.html	765275	no	no	implicit
RESOLVD Renewable penetration levered by Efficient Low Voltage Distribution grids http://cordis.europa.eu/project/rcn/211950_en.html	773715	no	no	implicit
COLHD Commercial vehicles using Optimised Liquid biofuels and HVO Drivetrains http://cordis.europa.eu/project/rcn/211940_en.html	769974	no	no	implicit
FIESTA Federated Interoperable Semantic IoT/cloud Testbeds and Applications http://cordis.europa.eu/project/rcn/194117_en.html	643943	no	no	no
WiSHFUL Wireless Software and Hardware platforms for Flexible and Unified radio and network control http://cordis.europa.eu/project/rcn/194304_en.html	645274	no	no	obvious
My-TRAC My TRAVel Companion http://cordis.europa.eu/project/rcn/211972_en.html	777640	no	yes	-

Table 20: Analysis of H2020 research projects of UPC

Summary

Summarizing the gender analysis of the research projects at UPC the following table and associated figure show, that more than half of the projects show some kind of possibility to include gender perspectives and only 34 projects show none (although it is to mention that also for these projects it would be possible to integrate the gender dimension in some way). 14 projects already contain a gender dimension, whereas 15 research projects show obvious opportunities to include gender issues. 45 research projects show implicit possibilities for the implementation of gender dimensions. Out of 108 analysed projects, 77 research projects showed either an already existing gender content or the possibility for an implementation (63 projects).

Ranking of research projects at UPC (2014-2017)	
Research projects with existing gender content	14
Research projects with obvious possibilities to include gender	15
Research projects with implicit possibilities to include gender	45
Research projects that show no possibilities to include gender	34

Table 21: Ranking of research projects at UPC

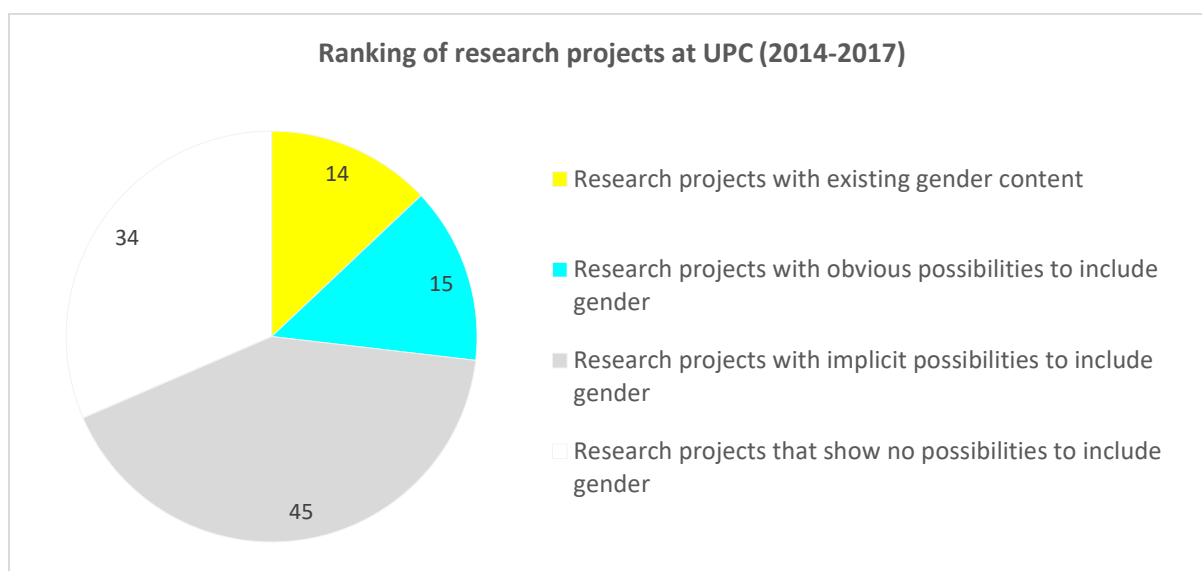


Figure 4: Ranking of research projects at UPC (2014-2017)

The table below lists the research projects at UPC where existing gender contents were found and the research projects that show obvious possibilities to include gender perspectives.

UPC: Research projects showing existing gender content or obvious possibilities to include gender perspectives (2014-2017)		
H2020 Projects	EU Nr.	Ranking
CAPTOR	688110	existing gender content
CAREGIVERSPRO-MMD	690211	existing gender content
CONNECT	734922	existing gender content
EMPOWER	636249	existing gender content
EnerGAware	649673	existing gender content
GEECCO	741128	existing gender content
MInD	691001	existing gender content
MIRROR	676207	existing gender content
My-TRAC	777640	existing gender content

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OPENREQ	732463	existing gender content
SOMATCH	644859	existing gender content
SUPERSEDE	644018	existing gender content
VITAL	639275	existing gender content
WOMEN-UP	643535	existing gender content
ACTRIS PPP	739530	obvious
CASPER	645393	obvious
CORUS	763551	obvious
ECOBULK	730456	obvious
IGATO	702019	obvious
INCITE	675318	obvious
INVADE	731148	obvious
Morpheos	732399	obvious
netCommons	88768	obvious
R4E	649397	obvious
TREASURE	634476	obvious
ANYWHERE	700099	obvious
MEDIRAD	755523	obvious
SKHINCAPS	685909	obvious
WiSHFUL	645274	obvious

Table 22: UPC: research projects showing existing gender content or obvious possibilities to include gender perspectives

Teaching⁴

Structure of curricula documents

The curricula documents and course descriptions of UPC are structured as follows and include the following information about the structure and content of the specific study field as well as the courses:

Curricula Structure UPC⁵	
Document: Curriculum for the Study	
Short Description of the Study	
INTRODUCTION:	Duration Study load Delivery Fees and grants Official degree Double-degree agreements
ADMISSION:	Places Registration and enrolment Legalisation of foreign documents
PROFESSIONAL OPPORTUNITIES	
ORGANISATION:	Academic calendar Academic regulations Language certification and credit recognition This degree is also taught at
CURRICULUM:	Table with: subject - ECTS credits - Type (Compulsory/Optional) Ordered by: Semester
Document: Course Description	
General Information:	Coordinating unit Teaching Unit Academic Year Degree ECTS Credits Teaching Languages
Teaching Staff – Coordinator	
Degree competences to which the subject contributes	
Teaching Methodology	
Learning objectives of the subject	
Study Load	
Content	
Qualification System	
Bibliography	

Table 23: Curricula structure of UPC

⁴ Links to the detailed curricula of the chosen studies are attached in the Annexe.

⁵ Links to the detailed curricula of the chosen studies are attached in the Annexe.

Selected fields of study

The following curricula have been selected for an in-depth gender analysis under task 6.1⁶:

- Bachelor Industrial Technology Engineering
- Master Industrial Engineering
- Bachelor Informatics Engineering
- Master in Innovation and Research in Informatics
- Bachelor's degree in Telecommunications Technologies and Services Engineering
- Master Telecommunications Engineering
- Bachelor Agricultural, Environmental and Landscape Engineering
- Master Environmental Engineering
- Master Architecture
- Bachelor Architecture Studies
- Bachelor Civil Engineering
- Master Civil Engineering

The following table shows all the selected fields of study and associated groups of study that will be analysed in the upcoming chapter.

The diagram demonstrates the number of all courses included in the selected studies that were analysed (832) and the segmentation of courses with an already existing gender content (7), courses with either obvious (76) or implicit (118) possibilities to include gender perspectives and courses that didn't evince existing gender content or chances to implement the gender dimension (631). Although it is to say, that it would be possible to involve some kind of gender dimension in almost every course and study. In this ranking, courses that occurred in multiple studies were only counted once (not multiple times).

	Field of study	Group of study
1	Bachelor Architecture	Architecture Studies
2	Master Architecture	Architecture Studies
3	Bachelor Civil Engineering	Civil Engineering
4	Master Civil Engineering	Civil Engineering
5	Bachelor Agricultural, Environmental and Landscape Engineering	Environmental Engineering
6	Master Environmental Engineering	Environmental Engineering
7	Bachelor Industrial Technology Engineering	Industrial Engineering
8	Master Industrial Engineering	Industrial Engineering
9	Bachelor Informatics Engineering	Informatics Engineering
10	Master in Innovation and Research in Informatics	Informatics Engineering
11	Master Telecommunications Engineering	Telecommunications
12	Bachelor Telecommunications Technologies and Services Engineering	Telecommunications

Table 24: Selected fields of study and groups of study at UPC

⁶ This selection was slightly modified after submitting D3.4.

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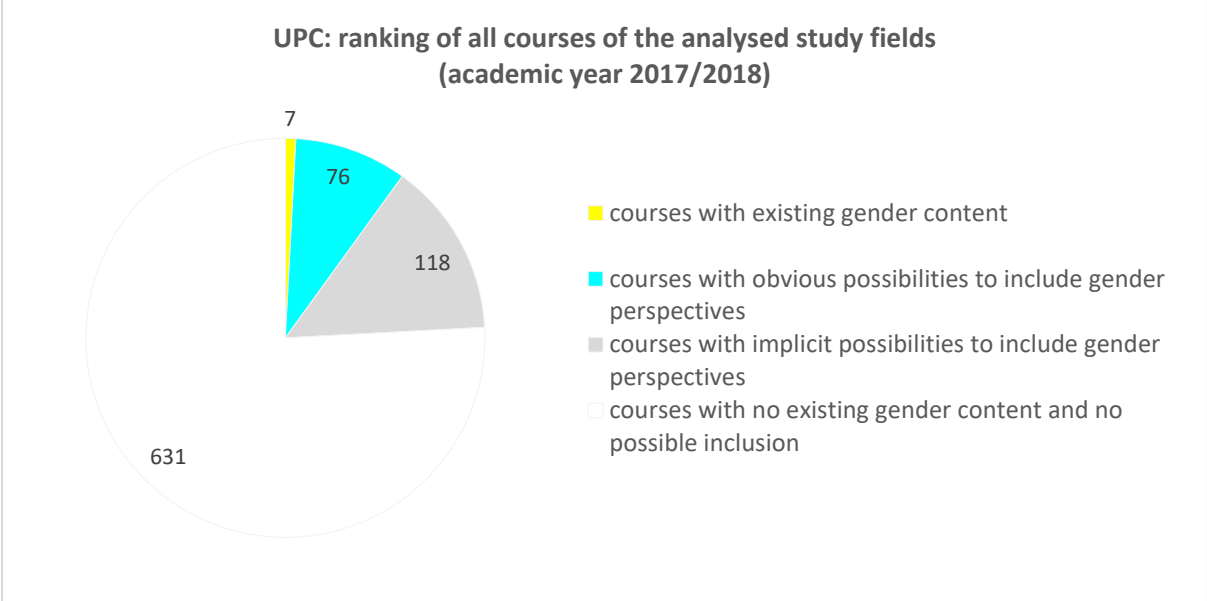


Figure 5: UPC: ranking of all courses of the analysed study fields (academic year 2017/2018)

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Curricula analysis

The table below contains all the selected fields of study from the university (for task 6.1), plus the detected courses of the study fields that either already include gender dimensions within their curricula concept or that would have the potential to involve gender issues in different ways – either obviously or implicit. The list does not include all the courses of the study fields. The courses are categorised with an “x” whether they show an existing content, an obvious possibility or an implicit possibility for a gender dimension implementation. This analysis is based on the curricula of the academic year 2017/2018.

Field of studies	Course	Existing gender content	obvious	implicit
Bachelor Agricultural, Environmental and Landscape Engineering	Environment and Environmental Impact	x		
	Life-Cycle Assessment of Products and Processes	x		
	Landscape Design		x	
	Building News Landscapes		x	
	Implementation and Management of Green Spaces		x	
	Landscape History and Composition		x	
	Work Placement		x	
	Bachelor's Thesis			x
	Ecology and Environmental Management Systems			x
	Economics and Business Administration			x
	Energy Systems and Component			x
	Entrepreneurship in the Agri-Food Sector			x
	Environmental Valuation and Policy			x
	Market Analysis and Agricultural Valuation			x
	Statistics			x
Bachelor Architecture	Commercial Activity and Urban Form	x		
	Anthropology of the City		x	
	Anthropology of the City. the City as a Framework of the Culture of Living Seminar		x	
	Cities in History		x	
	Designing Structural Public Space Seminar		x	
	Public Space/Urban Design		x	
	Space: Unity and Privacy		x	
	The Role of Science and Technology in Contemporary Culture		x	
	To Build Communities Seminar		x	
	To Build Communities Seminar I		x	
	To Build Communities Seminar II		x	

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Urban Design I		x	
Urban Design II		x	
Urban Design III		x	
Urban Design IV		x	
Urban Design V		x	
Urban Design VI		x	
Basis for Theory		x	
Contemporary Architecture: Learning Today, Building Today		x	
History of Spanish Architecture (XIX-XX)		x	
History of Spanish Architecture (XIX-XX)		x	
History of Western Art I		x	
History of Western Art I		x	
History of Western Art II		x	
History of Western Art II		x	
Housing and Cooperation		x	
Infrastructure, City and Architecture Seminar		x	
Infrastructure, City and Architecture Seminar I		x	
Infrastructure, City and Architecture Seminar II		x	
Middle East Tour		x	
Myths and Architecture in Western		x	
Urban Infrastructures and Services		x	
Urban Management		x	
Bachelor's Thesis			x
History I			x
History II			x
Architectural Representation I			x
Architectural Representation II			x
Architectural Representation III			x
Architectural Representation IV			x
Architecture and Cinema			x
Architecture and Cinema			x
Architecture and Cinema II			x
Architecture and Invention Seminar			x
Architecture and Invention Seminar I			x
Architecture and Invention Seminar II			x
Architecture and Politics			x
Architecture as Experience Seminar			x
Architecture as Experience Seminar I			x
Architecture as Experience Seminar II			x
Architecture, Materials and Environment			x

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	Arne Jacobsen			X
	Barcelona I: Walking Barcelona			X
	Barcelona II: Designing Barcelona			X
	Business Management and Start-Up for Architects			X
	City Drawn by Architects			X
	Collective Housing: Precedents, Current Developments and Alternatives			X
	Design Project Technical Innovation: Case Study			X
	Environmental Architecture. Energy Saving			X
	Environment and Architectural Parameters: a Projectual Method			X
	Environmental Architecture: Energy Saving			X
	Industrialized Construction and Innovation			X
	Industrialized Construction and Innovation			X
	Law and Management in Architecture			X
	Sustainability Dimensions: Environmental Parameters in Architectural Design			X
	Territory and Landscape			X
	The Urban Reform			X
	Urban Policies			X
	Urban Regeneration and Reconversion Seminar			X
	Urbanism and Ecology. Concepts, Strategies and Projects			X
Bachelor Civil Engineering	Transportation	X		
	Economy, Business and Legislation	X		
	Environmental Engineering	X		
	Projects and Business Organisation	X		
	Urbanism		X	
	Roads and Railways		X	
	Probability and Statistics			X
	Bachelor's Thesis			X
Bachelor Industrial Technology Engineering	Human Preparation for Workplace	X		
	Culture, Technology and History in China and Japan		X	
	Debates on Technology and Society		X	
	Technological and Scientific Development in Antiquity. Egypt and Middle East		X	
	The Origins of Modern Engineering		X	

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	Albert Einstein and Science and the Technique of the 20th Century		x	
	Project Management		x	
	Engineering of the Product		x	
	Entrepreneurship			x
	History of Invention and Technological Innovation			x
	Oral Communication in Academic and Professional English			x
	The History of Applied Mathematics in Engineering			x
	Tools for the Planning and Management of Projects			x
	Written Communication in English: the Bachelors'S/Master's Thesis			x
	Bachelor's Thesis			x
	Computer Games. Structure and Development			x
	Data Analysis for Business and Industry			x
	Decision and Negotiation in Industrial Engineering			x
	Economics and Business			x
	Electric Mobility			x
	Environmental Technology and Sustainability			x
	Management Systems			x
	Organisation and Management			x
	Project I			x
	Project II			x
Bachelor Informatics Engineering	Free Software and Social Development		x	
	Social and Environmental Issues Od Information Technologies		x	
	Academic and Professional Speaking Skills			x
	Academic Skills for Developing a Project			x
	Business and Economic Environment			x
	Writing Skills for Engineering			x
	Bachelor's Thesis			x
	Data Analysis and Information Exploitation			x
	Data Mining			x
	Digital Strategy for Organisations			x
	E-Business			x
	Information Systems for Organisations			x
	Marketing on Internet			x

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	Probability and Statistics			x
	Viability of Business Projects			x
	Videogames			x
Bachelor Telecommunications Technologies and Services Engineering	Technology and Culture	x		
	Basic Engineering Project	x		
	Introduction to Ict Engineering	x		
	Marketing, Technology and Management Skills		x	
	Create Your Future: Just a Job or Your True Passion		x	
	History of Computing		x	
	Economics and Management			x
	(Ang) External Practice			x
	Audio and Speech Processing			x
	Bachelor's Thesis			x
	Business Analytics and Business Intelligence			x
	Financial Engineering for Economic Planning of Investments			x
	Financial Topics for Entrepreneurship			x
	ICT Entrepreneurship Project			x
	Ictd. Technology for Sustainable Development			x
	Image and Video Processing			x
	Internet Transport, Control and Management			x
	Probability and Statistics			x
	Statistical Tools for Social Networks and the Www			x
	Statistics			x
	Technical Writing			x
	Telecommunication History			x
Master Architecture	Housing and Sustainability: Physical Rehabilitation and Social and Urban Regeneration		x	
	Theory and Practice of Urban and Building Design		x	
	Activities and Architecture in the City		x	
	Contemporary Architecture		x	
	Final Thesis			x
	Architectural Representation Workshop: New Approaches			x
	Structural Projects in Architecture			x
Master Civil Engineering	Planning and Management of Transportation	x		
	Urban Planning and Urban Service Infrastructure	x		

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	Sustainability and Development Engineering	x		
	Urban Mobility		x	
	Master Thesis			x
	Environmental Modelling			x
	Life-Cycle Analysis and Sustainability Assessment			x
	Models and Tools for Project and Financial Management			x
	Models for Decision Making and Optimization in Engineering			x
	Road Network Planning and Operation			x
	Structural Management			x
Master Environmental Engineering	Environmental Economics, Legislation and Policy	x		
	Urban Metabolism and Ecological Urbanism	x		
	Socio-Environmental Statistics and Decision-Making		x	
	Climate and Climate Change		x	
	Master's Thesis			x
	Characterization, Management and Treatment of Waste			x
	Ecomaterials and Sustainable Construction			x
	Energy and Environment			x
	Environmental and Ecological Economics			x
	Environmental Engineering and Energy			x
	Environmental Systems			x
	Food Industry and Environment			x
	Integrated Environmental Assessment of Building Materials			x
	Life-Cycle Analysis and Sustainability Assessment			x
	Management of Environmental Projects			x
	Modeling of Environmental Systems			x
	Systems and Tools of Environmental Management			x
Master in Innovation and Research in Informatics	Advanced Human Languages Technologies		x	
	Bioinformatics and Statistical Genetics			x
	Master's Thesis			x
Master Industrial Engineering	Human Resources		x	
	Transports		x	
	Biomechanics			x

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	Information Systems			x
	Master's Thesis			x
	Architecture, Construction and Facilities			x
	Architecture, Construction and Facilities			x
	Business and Organization Management			x
	Constructions and Industrial Architecture			x
	Human Resources		x	
	Transports		x	
Master Telecommunications Engineering	Introduction to Research 1	x		
	Introduction to Research 2	x		
	Introduction to Research 3	x		
	Information Technology Service Management	x		
	Innovation Based Service Management	x		
	Internet and Networked Economy	x		
	Management of Telecommunications Projects	x		
	Networking and Future Internet Opportunities	x		
	Start-Up Initiation: Theory and Strategy		x	
	Master's Thesis			x
	Building Your Career. From Academia to Startups & Beyond			x
	Critical Thinking and Creativity			x
	Deep Learning for Speech and Language			x
	Internships in companies			x
	Digital Image and Video Processing			x
	Digital Image and Video Processing			x
	Digital Speech and Audio Processing			x
	Future (Inter)Net(Works)			x
	Future Trends in Mobile Communications			x
	Speech Technologies			x

Table 25: Curricula analysis of selected studies at UPC

Summary

The following summary shows the final number of courses regarding the selected studies at UPC with existing gender content, as well as obvious and implicit possibilities to include gender perspectives. The first table and the associated diagram demonstrate that 7 courses out of the selected studies at TUW already include a gender content, 76 courses show obvious possibilities to include gender perspectives and 118 courses show implicit possibilities to include gender perspectives. In this table and figure the courses were counted only once, although some of them appear more often in the analysis for different studies. The table after the figure evinces the number of assigned courses according to the selected groups of study at UPC (here courses could be counted in more often).

UPC: Numbers of assigned courses (academic year 2017/2018)	
Courses with existing gender related content	7
Courses with obvious possibilities to include gender perspectives	76
Courses with implicit possibilities to include gender perspectives	118

Table 26: TUW: Numbers of assigned courses

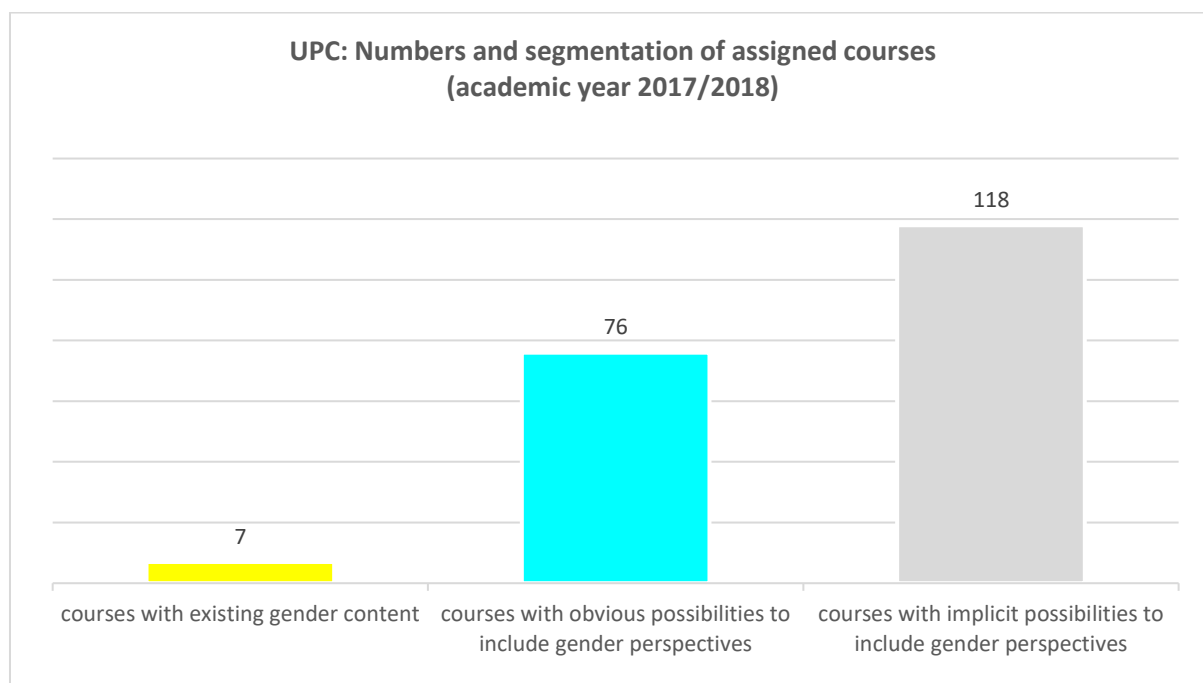


Figure 6: UPC: Numbers and segmentation of assigned courses

TUW: Number of assigned courses by groups of study				
Groups of study	Fields of study	Existing gender content	obvious	implicit
Architecture Studies	Bachelor Architecture	1	36	40
	Master Architecture			
Civil Engineering	Bachelor Civil Engineering	3	7	9
	Master Civil Engineering			
Environmental Engineering	Bachelor Agricultural, Environmental and Landscape Engineering	0	11	21
	Master Environmental Engineering			

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Industrial Engineering	Bachelor Industrial Technology Engineering			
	Master Industrial Engineering	1	9	24
Informatics Engineering	Bachelor Informatics Engineering			
	Master in Innovation and Research in Informatics	0	3	16
Telecommunications	Bachelor Telecommunications Technologies and Services Engineering			
	Master Telecommunications Engineering	2	13	27

Table 27: UPC: Number of assigned courses by groups of study

The further tables contain listings of the actual courses that include gender dimensions and courses that have obvious opportunities to implement the gender perspective into their content. The table at the end reveals the text passages out of the curricula that involve the descriptions of the found gender content. At UPC it is notable that a range of the analysed courses includes sustainability and social commitment as transversal skills.

UPC: List of courses with existing gender content
Commercial Activity and Urban Form
Human Preparation for Workplace
Introduction to Ict Engineering
Networking and Future Internet Opportunities
Planning and Management of Transportation
Transportation
Urban Planning and Urban Service Infrastructure

Table 28: UPC: List of courses with existing gender content

UPC: List of courses with obvious possibilities to include gender perspectives
Activities and Architecture in the City
Advanced Human Languages Technologies
Albert Einstein and Science and the Technique of the 20th Century
Anthropology of the City
Anthropology of the City. the City as a Framework of the Culture of Living Seminar
Basic Engineering Project
Basis for Theory
Building News Landscapes
Cities in History
Climate and Climate Change
Contemporary Architecture
Contemporary Architecture: Learning Today, Building Today
Create Your Future: Just a Job or Your True Passion
Culture, Technology and History in China and Japan
Debates on Technology and Society
Designing Structural Public Space Seminar
Economy, Business and Legislation
Engineering of the Product
Environment and Environmental Impact
Environmental Economics, Legislation and Policy

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Environmental Engineering
Free Software and Social Development
History of Computing
History of Spanish Architecture (XIX-XX)
History of Western Art I
History of Western Art II
Housing and Cooperation
Housing and Sustainability: Physical Rehabilitation and Social and Urban Regeneration
Human Resources
Implementation and Management of Green Spaces
Information Technology Service Management
Infrastructure, City and Architecture Seminar
Infrastructure, City and Architecture Seminar I
Infrastructure, City and Architecture Seminar II
Innovation Based Service Management
Internet and Networked Economy
Introduction to Research 1
Introduction to Research 2
Introduction to Research 3
Landscape Design
Landscape History and Composition
Life-Cycle Assessment of Products and Processes
Management of Telecommunications Projects
Marketing, Technology and Management Skills
Middle East Tour
Myths and Architecture in Western
Projects and Business Organisation
Project Management
Public Space/Urban Design
Roads and Railways
Social and Environmental Issues of Information Technologies
Socio-Environmental Statistics and Decision-Making
Space: Unity and Privacy
Start-Up Initiation: Theory and Strategy
Sustainability and Development Engineering
Technological and Scientific Development in Antiquity. Egypt and Middle East
Technology and Culture
The Origins of Modern Engineering
The Role of Science and Technology in Contemporary Culture
Theory and Practice of Urban and Building Design
To Build Communities Seminar
To Build Communities Seminar I
To Build Communities Seminar II
Transports
Urban Design I

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Urban Design II
Urban Design III
Urban Design IV
Urban Design V
Urban Design VI
Urban Infrastructures and Services
Urban Management
Urban Metabolism and Ecological Urbanism
Urban Mobility
Urbanism
Work Placement

Table 29: UPC: List of courses with obvious possibilities to include gender perspectives

UPC: Text passages of courses with existing gender content	
Commercial Activity and Urban Form	Adequate knowledge of the traditions of architecture, urban planning and landscape design of Western culture, as well as their technical, climatic, economic, social and ideological bases . Awareness and social commitment: To know and understand the complexity of economic and social phenomena characteristic of the welfare state; ability to relate welfare to globalisation and sustainability; ability to use technical knowledge, technology, economics and sustainability in a balanced and compatible manner.
Human Preparation for Workplace	Features that are sought. Contractual arrangements. Diversity of labour situations. Work of men and women . Work of youthful graduates. Jobs in Barcelona, Catalonia, Spain and EU (advisory centres, ECTS ...). Employment policy
Introduction to Ict Engineering	Commitment to society: Basic knowledge of social commitment in the field of engineering ICT democratic values and equal opportunities for women and men . We present regulations regional, national and European.
Networking and Future Internet Opportunities	Knowledge of Future Internet seen from social and business perspectives . Skills in exploring the opportunities in Future Internet, by relating technical, social and business aspects . Competences in working together in teams across scientific areas, countries and cultures , and to bring into play his/her own knowledge in such a context.
Planning and Management of Transportation	Analyse and interpret the regulation and impact of infrastructure and their repercussions for sustainable development, taking into account economic, environmental, social and cultural factors ; Transport planning: Multi-modal transport and mobility; Transport systems and territorial impact; Hierarchy of transport systems; Physical limitations of transport systems: Capacity and performance ; Impacts of transports systems: Environmental, physical, social, cultural , economic; Planning physical, biological, economic and social . Environmental and social impact .

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	<p>Macroeconomics: input-output tables, indirect and induced effects. Effects developing country, society. Union micro-macro (Weintraub).</p> <p>City design. Origins of modern cities and theories about its shape and organization. Analysis of current problems related to the shape of the city in relation to the management, planning, social structure and physical design.</p> <p>The ability to analyse and interpret the regulation and impact of infrastructure and their repercussions for sustainable development, taking into account economic, environmental, social and cultural factors.</p>
Transportation	<p>Students will learn to plan, design, manage and maintain systems suitable for use in civil engineering. They will develop a systematic approach to the complete life-cycle of a civil engineering infrastructure, system or service, which includes drafting and finalising project plans, identifying the basic materials and technologies required, making decisions, managing the different project activities, performing measurements, calculations and assessments, ensuring compliance with specifications, regulations and compulsory standards, evaluating the social and environmental impact of the processes and techniques used, and conducting economic analyses of human and material resources.</p> <p>Knowledge of causal and quantitative performance of transport systems as well as the stakeholder behavior (users, transport agencies and society).</p>
Urban Planning and Urban Service Infrastructure	<p>The ability to analyse and interpret the regulation and impact of infrastructure and their repercussions for sustainable development, taking into account economic, environmental, social and cultural factors.</p> <p>Basic functions of the street side access to the space plots enable and buildings infrastructure passing through; public space of social relations. Character of the street according to the organization, development, functions and uses, and the container side.</p>

Table 30: UPC: Text passages of courses with existing gender content

In-depth analysis of UNIRC

The following chapter shows the results and outcomes of the in-depth gender analysis regarding research and teaching, based on current FP7 and H2020 projects and selected curricula and courses. The sources used for the analysis, such as a list of current FP7 and H2020 funded projects and a selection of curricula was provided by the RPO-partner. As for the analysis of the curricula the English version of the RPO's website was used as a data source. The analysis points out where gender content is already included, and which courses or projects show possibilities for an involvement of the gender dimension. Therefore, the chapter is divided into 1) Research and 2) Teaching. The analysis was carried out according to the methodology, described in the respective chapter.

Research

The following table shows all current research projects of UNIRC, granted by the EC. The sample of UNIRC consists of current H2020 projects as well as projects granted under the previous European research programme: the seventh framework programme (FP7-PEOPLE, FP7-SECURITY, FP7-KBBE).

The following table shows six different H2020 research projects to analyse at UNIRC and categorises them regarding to the detected gender related contents and possibilities to include gender perspectives: all of them show either obvious or implicit possibilities to include gender perspectives into their content, one of them shows an existing gender related content.

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
MAPS-LED Multidisciplinary Approach to Plan Smart Specialisation Strategies for Local Economic Development H2020-project http://cordis.europa.eu/project/rcn/194342_en.html	645651	no	no	obvious
PLENOSE LARGE MULTIPURPOSE PLATFORMS FOR EXPLOITING RENEWABLE ENERGY IN OPEN SEAS FP7-project http://cordis.europa.eu/project/rcn/109725_en.html	612581	no	no	implicit
BESECURE Best practice Enhancers for Security in Urban Environments FP7-project http://cordis.europa.eu/project/rcn/102646_en.html	285222	no	no	obvious
CLUDs Commercial Local Urban District Programme	269142	no	no	obvious

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
FP7-project http://cordis.europa.eu/project/rcn/99152_en.html				
Legume-Futures cropping Legume-supported systems for Europe FP7-project http://cordis.europa.eu/project/rcn/94557_en.html	245216	no	no	implicit
GEECCO Gender Equality in Engineering through Communication and Commitment H2020-project http://cordis.europa.eu/project/rcn/210240_en.html	741128	yes	yes	-

Table 31: Analysis of H2020 research projects of UNIRC

Summary

Summarizing the gender analysis of the research projects at UNIRC the following table and associated figure show that there one of the projects shows an existing gender content (Geecco), all of the other research projects either show obvious or implicit possibilities to include gender dimensions. 3 of the 5 analysed research projects show obvious opportunities to include gender issues, 2 research projects show implicit possibilities.

Ranking of current research projects at UNIRC (2017)	
Research projects with existing gender content	1
Research projects with obvious possibilities to include gender	3
Research projects with implicit possibilities to include gender	2

Table 32: Ranking of research projects at UNIRC

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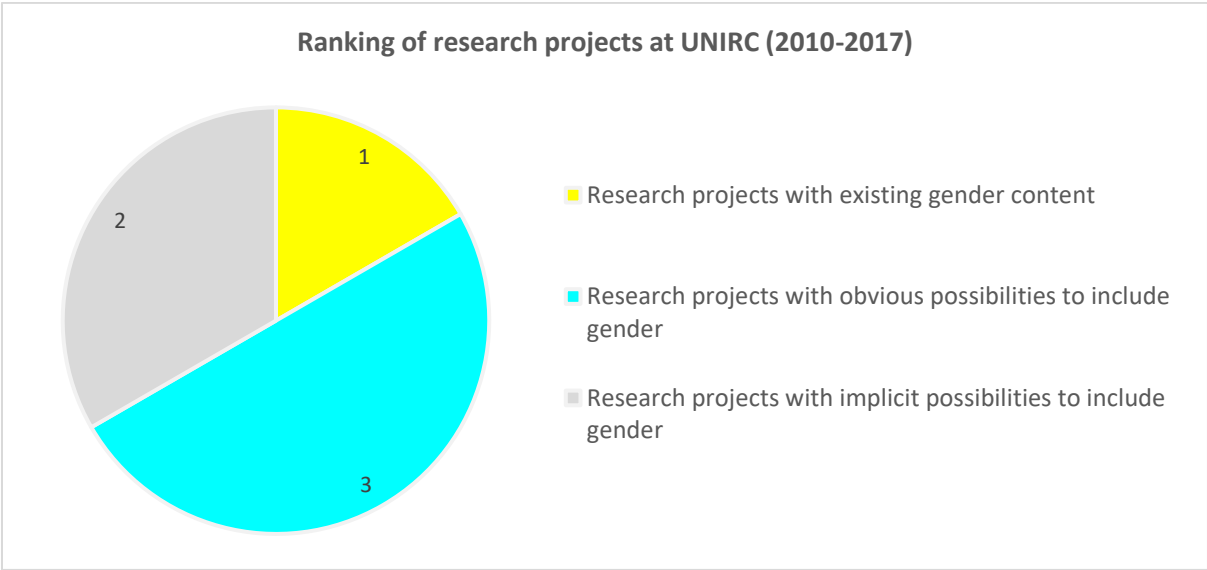


Figure 7: Ranking of research projects at UNIRC (2017)

The table below lists the research projects at UNIRC regarding their existing gender content or obvious or implicit possibilities to include gender perspectives.

UNIRC: Research projects showing obvious or implicit possibilities to include gender perspectives (2017)		
H2020 Projects	EU Nr.	Ranking
GEECCO	741128	existing gender content
MAPS-LED	645651	obvious
BESECURE	285222	obvious
CLUDs	269142	obvious
PLENOSE	612581	implicit
Legume-Futures	245216	implicit

Table 33: UNIRC: Research projects showing obvious or implicit possibilities to include gender perspectives

Teaching⁷

Structure of curricula documents

The Curricula documents and course descriptions of UNIRC are structured as follows and include the following information about the structure and content of the specific study field as well as the courses:

Curricula Structure UNIRC⁸	
Online Curriculum for the Study	
Training Objectives	
Curriculum: Courses ordered by year (first year, second year, third year)	
Document: Course Description	
Basic information:	Subject Code Subject Name Professor Department Degree Course Class Type of educational activity Disciplinary Area Scientific-Disciplinary Sector Compulsory preliminary exams Course Year Semester ECTS Hours
Synthetic description	
Acquisition of knowledge on	
Evaluation method	
Student's independent work	
Detailed course program	

Table 34: Curricula structure of UNIRC

⁷ Links to the detailed curricula of the chosen studies are attached in the Annexe.

⁸ Links to the detailed curricula of the chosen studies are attached in the Annexe.

Selected fields of study

The following curricula have been selected for an in-depth gender analysis under task 6.1⁹:

- Bachelor Environmental Engineering
- Master Environmental Engineering
- Bachelor Civil Engineering
- Master Civil Engineering
- Bachelor Energy Engineering
- Master Design of Infrastructure and Transport Systems (Specialization of Civil Engineering)

The following table shows all the selected fields of study and associated groups of study that will be analysed in the upcoming chapter.

The diagram demonstrates the number of all courses included in the selected studies that were analysed (69) and the segmentation of courses with an already existing gender content (0), courses with either obvious (6) or implicit (20) possibilities to include gender perspectives and courses that didn't evince existing gender content or chances to implement the gender dimension (43). Although it is to say, that it would be possible to involve some kind of gender dimension in almost every course and study. In this ranking, courses that occurred in multiple studies were only counted once (not multiple times).

	Field of study	Group of study
1	Bachelor Civil Engineering	Civil Engineering
2	Master Civil Engineering	Civil Engineering
3	Bachelor Energy Engineering	Energy Engineering
4	Bachelor Environmental Engineering	Environmental Engineering
5	Master Environmental Engineering	Environmental Engineering
6	Master Design of Infrastructure and Transport Systems (specialization of Master in Civil Engineering)	Transport Engineering

Table 35: Selected fields of study and groups of study at UNIRC

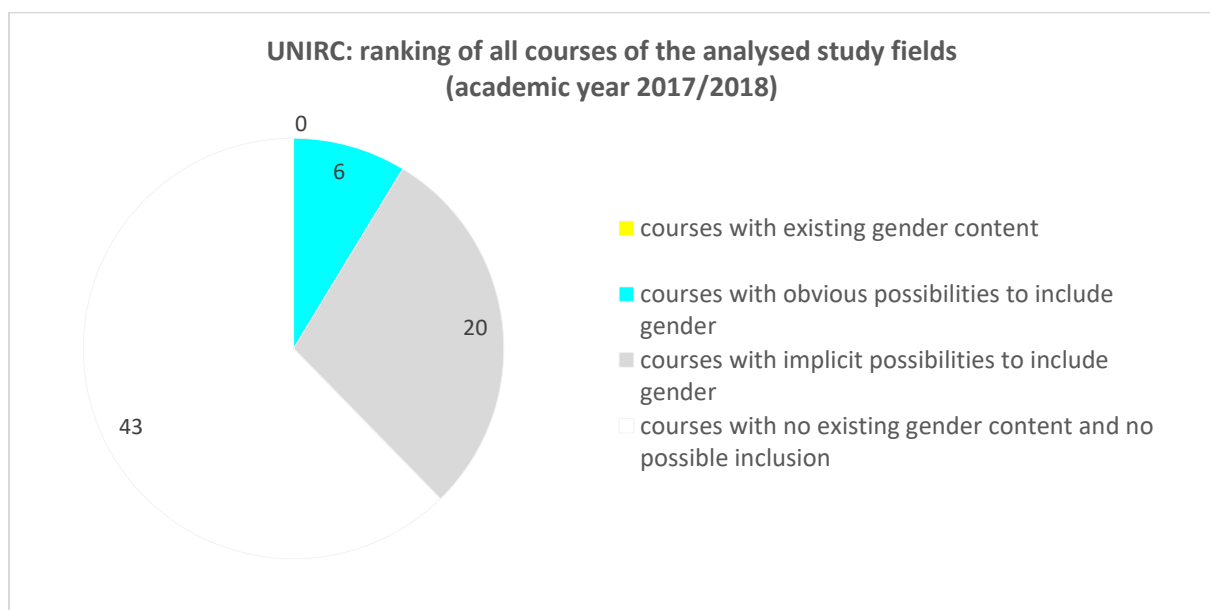


Figure 8: UNIRC: ranking of all courses of the analysed study fields (academic year 2017/2018)

⁹ This selection was slightly modified after submitting D3.4.

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Curricula analysis

The table below contains all the selected fields of study from the university (for task 6.x), plus the detected courses of the study fields that either already include gender dimensions within their curricula concept or that would have the potential to involve gender issues in different ways – either obviously or implicit. The list does not include all the courses of the study fields. The courses are categorised with an “x” whether they show an existing content, an obvious possibility or an implicit possibility for a gender dimension implementation. This analysis is based on the curricula of the academic year 2017/2018.

Field of studies	Course	Existing gender content	obvious	implicit
Bachelor Civil Engineering	English			x
	Environmental Technical Physics			x
	Final project			x
	Internship			x
	Road Constructions I & Road Constructions II			x
	Technical Architecture			x
	Technique and Economy of Transport			x
	English			x
Bachelor Energy Engineering	Sanitary Environmental Engineering		x	
	Technics of Environmental Control			x
	Internship			x
	Chemistry for Environment and Energy and			x
	Electric, Electronic and Environmental Measurements			x
	English			x
	Environmental Technical Physics			x
	Final project			x
Bachelor Environmental Engineering	Sanitary Environmental Engineering		x	
	English			x
	Environmental Technical Physics			x
	Road Constructions I and Environmental Impact Assessment			x
	Environmental Impact Assessment			x
	Final project			x
	Internship			x
Master Civil Engineering	Airport and Heliport Infrastructures & Rail Infrastructures			x
Master Environmental Engineering	Land use and Transport		x	
	Environmental Data and Signals Processing			x
	Safety Model & Environmental Geotechnics			x
	Electric, Electronic and Environmental Measurements			x

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Field of studies	Course	Existing gender content	obvious	implicit
Master Design of Infrastructure and Transport Systems (specialization of Master in Civil Engineering)	Railway infrastructures and intermodal nodes		x	
	Transportation Systems Engineering		x	
	Advanced Transport Infrastructure Design		x	
	Activities in B-Infrastructure			x
	Airport and Heliport Infrastructures			x
	Bridges and large structures			x
	Internship			x
	Project Management			x
	Safety models			x
	Evaluation of environmental impact			x

Table 36: Curricula analysis of selected studies at UniRC

Summary

The following summary shows the final number of courses regarding the selected studies at UNIRC with obvious and implicit possibilities to include gender perspectives. Within the courses of the studies, there was no existing gender content found. The first table and the associated diagram demonstrate this fact and further that 6 courses out of the selected studies at UNIRC show obvious possibilities to include gender perspectives and 20 courses show implicit possibilities to include gender perspectives. In this table and figure the courses were counted only once, although some of them appear more often in the analysis for different studies. The table after the figure evinces the number of assigned courses according to the selected groups of study at UNIRC (here courses could be counted in more often).

UNIRC: Numbers of assigned courses (academic year 2017/2018)	
courses with existing gender content	0
courses with obvious possibilities to include gender	6
courses with implicit possibilities to include gender	20

Table 37: UNIRC: Numbers of assigned courses

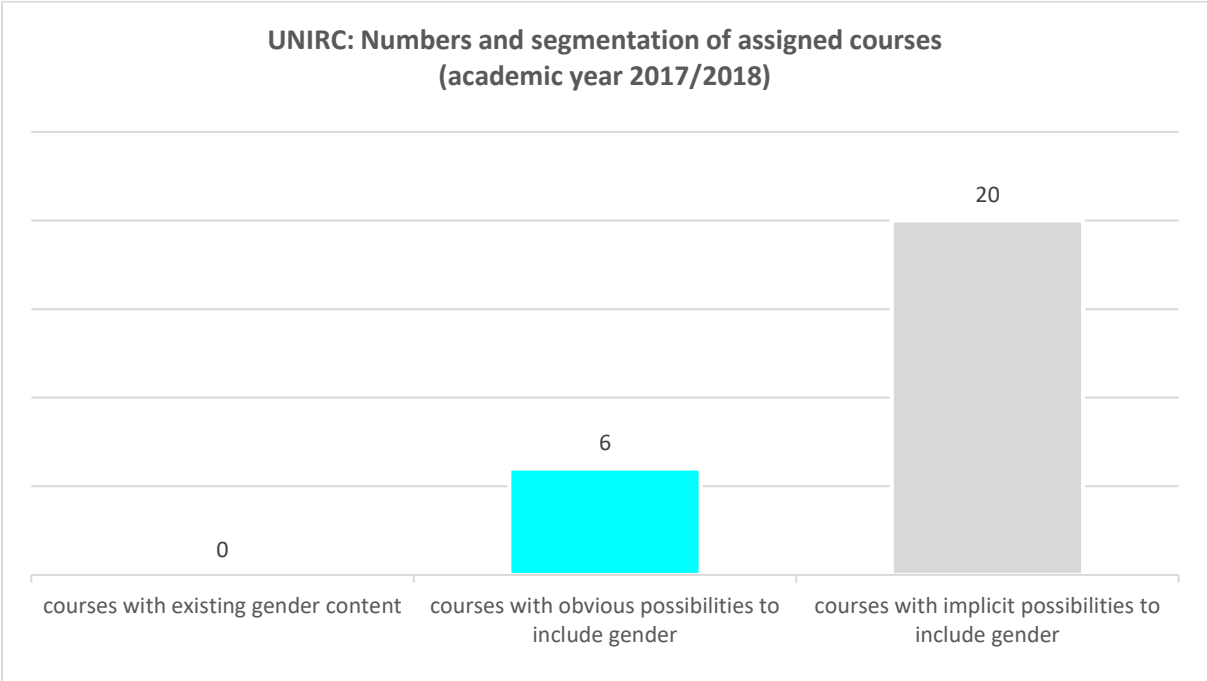


Figure 9: UNIRC: Numbers and segmentation of assigned courses

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UNIRC: Number of assigned courses by groups of study				
Groups of study	Fields of study	Existing gender content	obvious	implicit
Civil Engineering	Bachelor Civil Engineering	0	1	7
	Master Civil Engineering			
Energy Engineering	Bachelor Energy Engineering	0	1	7
Environmental Engineering	Bachelor Environmental Engineering	0	2	9
	Master Environmental Engineering			
Transport Engineering	Master Design of Infrastructure and Transport Systems (specialization of Master in Civil Engineering)	0	3	7

Table 38: UniRC: Number of assigned courses by groups of study

The following table contains listings of the actual courses that have obvious opportunities to implement the gender perspective into their content.

UNIRC: List of courses with obvious possibilities to include gender perspectives
Advanced Transport Infrastructure Design
Airport and Heliport Infrastructures & Rail Infrastructures
Land use and Transport
Railway infrastructures and intermodal nodes
Sanitary Environmental Engineering
Transportation Systems Engineering

Table 39: UniRC: List of courses with obvious possibilities to include gender perspectives

In-depth analysis of PK

The following chapter shows the results and outcomes of the in-depth gender analysis regarding curricula and courses as well as research projects of the university. The analysis points out where gender content is already included, and which courses or projects show possibilities for an involvement of the gender dimension. Therefore, the chapter is divided into 1) Research and 2) Teaching. The analysis was carried out according to the methodology.

Research

The following table shows all research projects of PK, granted under H2020 in a period from 2014 to 2017. The sources used for the analysis, such as a list of current H2020 funded projects and a selection of curricula was provided by the RPO-partner. As for the analysis of the curricula the English version of the RPO's website was used a data source. Furthermore, the table categorises it regarding to the detected gender related contents and possibilities to include gender perspectives.

The table shows that at PK there were three H2020 projects to analyse: one of the projects is Gender-Flagged and shows a gender related content. The other two projects would show implicit possibilities to include gender perspectives.

H2020 Projects	EU No.	Gender-Flagged?	Gender related content?	Possible to integrate gender perspectives?
Power2Nights Malopolska Researchers' Night 2014-2015 http://cordis.europa.eu/project/rcn/193215_en.html	633330	no	no	implicit
KAM2SouthPL2 http://cordis.europa.eu/project/rcn/198495_en.html	674820	no	no	implicit
GEECCO Gender Equality in Engineering through Communication and Commitment http://cordis.europa.eu/project/rcn/210240_en.html	741128	yes	yes	-

Table 40: Analysis of H2020 research projects of PK

Summary

Summarizing the gender analysis of the research projects at PK the following table and associated figure show that there was one project with existing gender content found, the other two analysed research projects show implicit possibilities to include gender dimensions.

Ranking of research projects at PK (2014-2017)	
Research projects with existing gender content	1
Research projects with implicit possibilities to include gender	2

Table 41: Ranking of research projects at PK

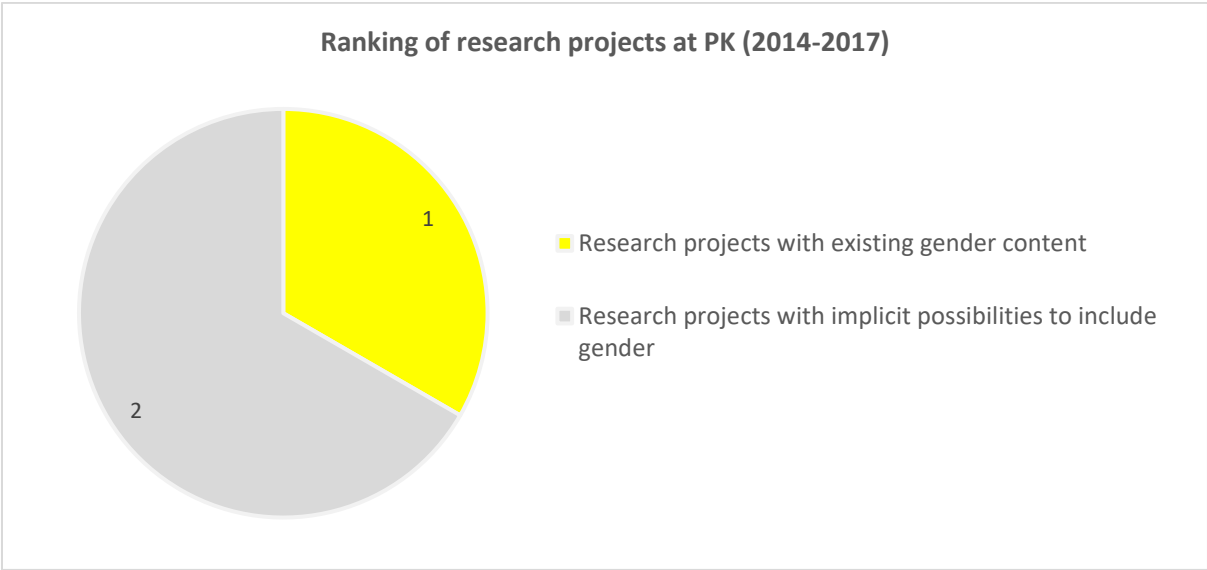


Figure 10: Ranking of research projects at PK (2014-2017)

PK: Research projects showing implicit possibilities to include gender perspectives (2014-2017)		
H2020 Projects	EU Nr.	Ranking
GEECCO	741128	existing gender content
Power2Nights	633330	implicit
KAM2SouthPL2	674820	implicit

Table 42: PK: Research projects showing implicit possibilities to include gender perspectives

Teaching¹⁰

Structure of curricula documents

The Curricula documents and course descriptions of PK are structured as follows and include the following informations about the structure and content of the specific study field as well as the courses:

Curricula Structure PK¹¹	
Online Curriculum for the Study	
Basic Information	Direction Specialty Degree Profile Mode
Curriculum	Courses ordered in a table by: General subjects Basic subjects Major subjects Specialization Subjects Subjects related to the diploma (Practice) The table includes: Semester Hours ECTS Direction Code
Exams	
Document: Course Description	
Information about the item	Course name name of the item in English Subject code Category of course subjects Number of ECTS points Semesters
Type of classes, number of hours in the study plan	
Objectives of the subject	
Initial requirements in terms of knowledge, skills and other competences	
Educational outcomes	
Program content	
Didactic tools	
The work load of the student	
Ways of assessment	
Matrix of the subject realization	
List of literature	
Information on academic teachers	
Approval of the item card for implementation	

Table 43: Curricula structure of PK

¹⁰ Links to the detailed curricula of the chosen studies are attached in the Annexe.

¹¹ Links to the detailed curricula of the chosen studies are attached in the Annexe.

Selected fields of study

The following curricula have been selected for an in-depth gender analysis under task 6.1¹²:

- Bachelor Mechanical Engineering
- Master Mechanical Engineering
- Bachelor Civil Engineering
- Master Civil Engineering
- Bachelor Transportation Planning (this curriculum is only available in Polish language, the analysis was carried out by Anton Pashkevich)
- Master Architecture

The following table shows all the selected fields of study and associated groups of study that will be analysed in the upcoming chapter.

The diagram demonstrates the number of all courses included in the selected studies that were analysed (244) and the segmentation of courses with an already existing gender content (0), courses with either obvious (30) or implicit (46) possibilities to include gender perspectives and courses that didn't evince existing gender content or chances to implement the gender dimension (168). Although it is to say, that it would be possible to involve some kind of gender dimension in almost every course and study. In this ranking, courses that occurred in multiple studies were only counted once (not multiple times).

	Field of study	Group of study
1	Master Architecture	Architecture Studies
2	Bachelor Civil Engineering	Civil Engineering
3	Master Civil Engineering	Civil Engineering
4	Bachelor Mechanical Engineering	Mechanical Engineering
5	Master Mechanical Engineering	Mechanical Engineering
6	Bachelor Transportation Planning	Transport Engineering

Table 44: Selected fields of study and groups of study at PK

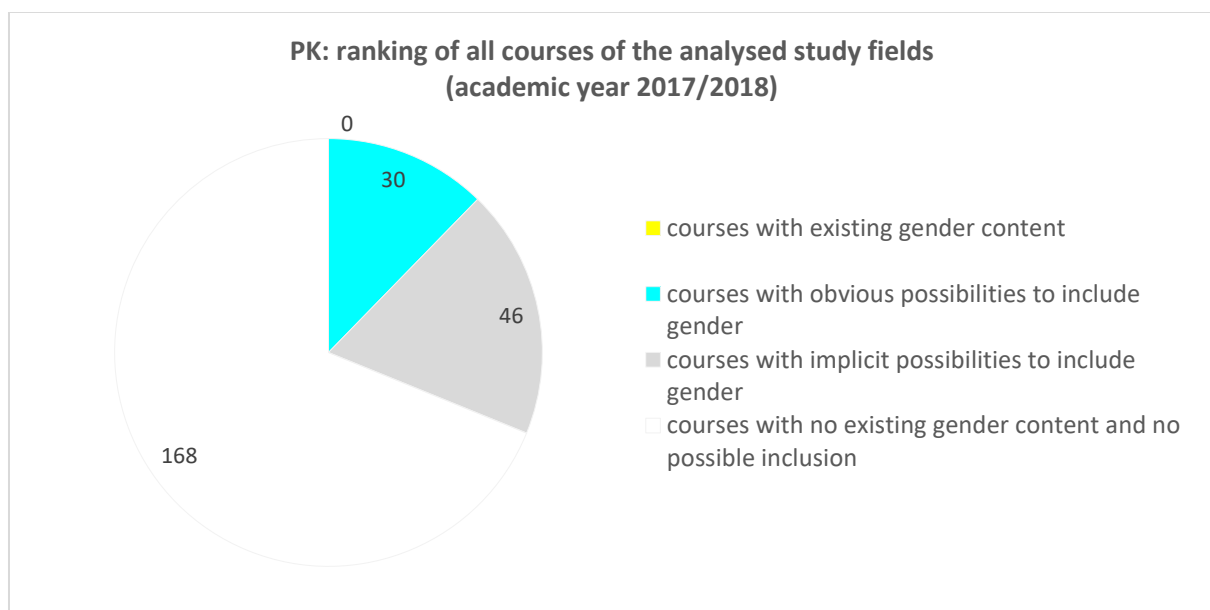


Figure 11: PK: ranking of all courses of the analysed study fields (academic year 2017/2018)

¹² This selection was slightly modified after submitting D3.4.

Curricula analysis

The table below contains all the selected fields of study from the university (for task 6.1), plus the detected courses of the study fields that either already include gender dimensions within their curricula concept or that would have the potential to involve gender issues in different ways – either obviously or implicit. The list does not include all the courses of the study fields. The courses are categorised with an “x” whether they show an existing content, an obvious possibility or an implicit possibility for a gender dimension implementation. This analysis is based on the curricula of the academic year 2017/2018.

As the course descriptions were not available in English, this analysis is not based on the course descriptions, but rests upon the evaluation of the course titles. Therefore, it was not possible to detect existing gender contents within the curricula.

Field of studies	Course	Existing gender content	obvious	implicit
Bachelor Civil Engineering	Elective Humanistic Course: Macroeconomics Foundations of Economic Policy (Modern Challenges)		x	
	Elective Humanistic Course: Principles of Macroeconomics (the Current European context)		x	
	Elective Humanistic Course: Interpersonal Communication		x	
	Architecture and Urban Design		x	
	Construction Supervision, Occupational Safety and Health		x	
	Introduction to Transportation Planning		x	
	Foreign language			x
	Physical Education			x
	Introduction to Civil Engineering			x
	Ecology			x
	Elements of Law in Engineering Practice			x
	Economics and Project Management			x
	Company Management			x
	Diploma Seminar			x
	Preparation of Diploma Project			x
Bachelor Mechanical Engineering	Selected aspects of human growth: Physical Education		x	
	Selected aspects of human growth: Relaxation Training		x	
	Selected aspects of human growth: Emotional Training		x	
	Ethics, psychology and sociology: Labour psychology and sociology		x	
	Ethics, psychology and sociology: Ethics for engineers		x	

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Field of studies	Course	Existing gender content	obvious	implicit
	Fundamentals of law and ergonomoy: Industrial safety and ergonomics		x	
	Fundamentals of law and ergonomoy: Fundamentals of law for engineers		x	
	Presentation: Interpersonal communication		x	
	Presentation: Autopresentation		x	
	Presentation: Rhetoric and presentation techniques		x	
	Foreign language: english			x
	Foreign language: german			x
	Foreign language: polish			x
	Foreign language: french			x
	Foreign language: russian			x
	Fundamentals of enterprise: Business economics			x
	Fundamentals of enterprise: Fundamentals of invention			x
	Fundamentals of enterprise: Fundamentals of management			x
	Theory of probability / Variational analysis			x
	Statistics / Distribution and transforms			x
	Ecology			x
	Optional modules: Renewable natural energy sources			x
	Optional modules: Environmental protection			x
	Professional training			x
	Individual activity: Diploma seminar I			x
	Individual activity: Students research activity			x
	Individual activity: Scientific project			x
	Diploma seminar II			x
	Engineering diploma project			x
Bachelor Transportation Planning	Physical education		x	
	Ethics		x	
	Basics of psychology and sociology		x	
	Basics of economics and marketing		x	
	Introduction to transport systems		x	
	Integrated transport systems		x	
	Ergonomics in transport		x	
	Foreign language: English (B2)			x
	Foreign Language: English (C1)			x

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Field of studies	Course	Existing gender content	obvious	implicit
	Foreign Language: French (B2)			x
	Foreign Language German (B2)			x
	Foreign Language: Russian (B2)			x
	Decision-making theory			x
	Probabilistic methods			x
	Organization and management			x
	Metrology			x
	Environmental protection in transport			x
	Diploma seminar			x
	Thesis			x
Master Architecture	Physical Education		x	
	History of Art and Culture		x	
	Landscape Architecture		x	
	Theory of Architecture and Urban Design: Theory of Architecture and Urban Design AF		x	
	Theory of Architecture and Urban Design: Theory of Architecture and Urban Design KL		x	
	Architecture and Urban Design: Architecture and Urban Design AF		x	
	Architecture and Urban Design: Architecture and Urban Design KL		x	
	Theory of Spatial Planning		x	
	Spatial Planning		x	
	Regional Planning		x	
	Theory and Principles of Urban Planning		x	
	Rural Architecture and Planning II		x	
	History of Contemporary Urban Design		x	
	Urban Design Survey Internship		x	
	Urban Transport		x	
	Contemporary Architecture		x	
	Ecology, Environment Protection			x
	Conservation of Monuments and Revalorisation			x
	Protection of Historical Urban Complexes			x
	Special Elective Classes			x
Diploma Design			x	
Specialist Consultations			x	
Design Internship			x	
Master Civil Engineering	Environment Protection in Civil Engineering			x

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Field of studies	Course	Existing gender content	obvious	implicit
	Diploma Seminar			x
	Preparation of Diploma Project			x
Master Mechanical Engineering	Physical aspects of human development: Health education		x	
	Physical aspects of human development: Physical education		x	
	Physical aspects of human development: Rehabilitation		x	
	Large scale European projects			x
	Foreign language: English			x
	Foreign language: German			x
	Foreign language: Polish			x
	Foreign language: French			x
	Foreign language: Russian			x
	Individual activity: Mid-course project			x
	Individual activity: Students research activity			x
	Individual activity: Scientific project			x
	Diploma seminar			x
	MSc Thesis			x

Table 45: Curricula analysis of selected studies at PK

Summary

The following summary shows the final number of courses regarding the selected studies at PK with obvious and implicit possibilities to include gender perspectives. Within the courses of the selected studies, it was not possible to detect existing gender contents as there was no information about the courses in English language available. Therefore, this analysis is not based on the course descriptions, but rests upon the evaluation of the course titles.

The first table and the associated diagram demonstrate that 30 courses out of the selected studies at PK show obvious possibilities and 46 courses show implicit possibilities to include gender perspectives. In this table and figure the courses were counted only once, although some of them appear more often in the analysis for different studies. The table after the figure evinces the number of assigned courses according to the selected groups of study at PK (here courses could be counted in more often).

PK: Numbers of assigned courses (academic year 2017/2018)	
courses with existing gender content	0
courses with obvious possibilities to include gender	30
courses with implicit possibilities to include gender	46

Table 46: PK: Numbers of assigned courses

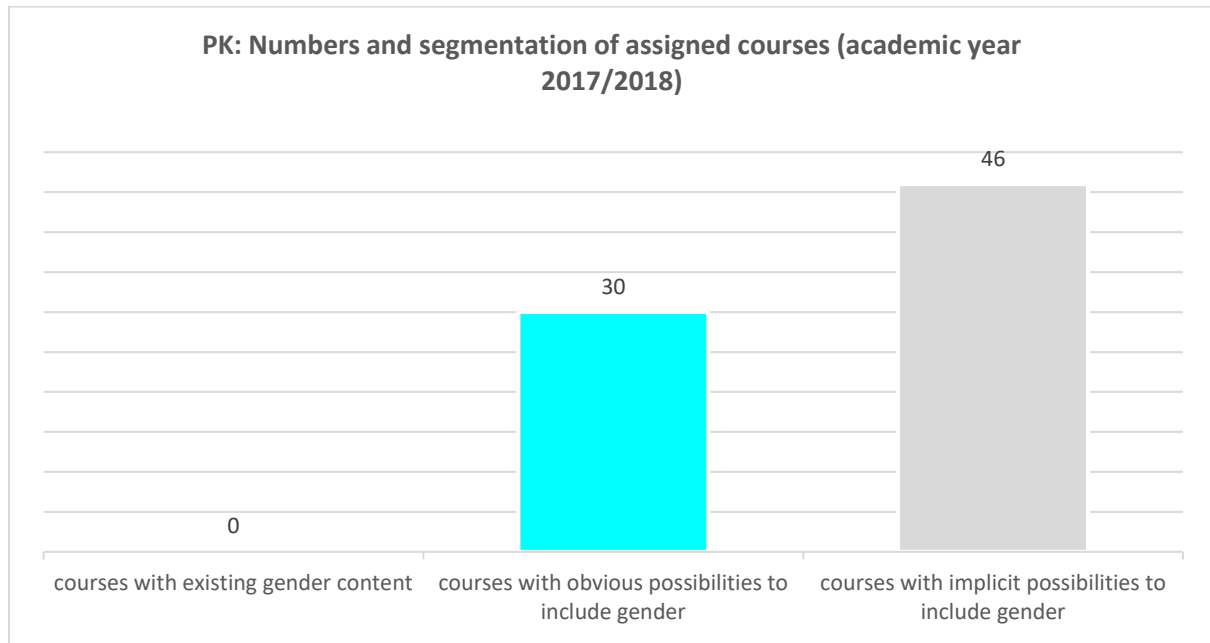


Figure 12: PK: Numbers and segmentation of assigned courses

PK: Number of assigned courses by groups of study				
Groups of study	Fields of study	Existing gender content	obvious	implicit
Architecture Studies	Master Architecture	0	16	7
Civil Engineering	Bachelor Civil Engineering	0	6	12
	Master Civil Engineering			
Mechanical Engineering	Bachelor Mechanical Engineering	0	13	30
	Master Mechanical Engineering			
Transport Engineering	Bachelor Transportation Planning	0	7	12

Table 47: PK: Number of assigned courses by groups of study

D6.1 Analysis of Current Data on Gender in Research and Teaching

The following table contains listings of the actual courses that have obvious opportunities to implement the gender perspective into their content.

PK: List of courses with obvious possibilities to include gender perspectives
Architecture and Urban Design
Architecture and Urban Design: Architecture and Urban Design AF
Architecture and Urban Design: Architecture and Urban Design KL
Basics of economics and marketing
Basics of psychology and sociology
Construction Supervision, Occupational Safety and Health
Contemporary Architecture
Elective Humanistic Course: Interpersonal Communication
Elective Humanistic Course: Macroeconomics Foundations of Economic Policy (Modern Challenges)
Elective Humanistic Course: Principles of Macroeconomics (the Current European context)
Ergonomics in transport
Ethics
Ethics, psychology and sociology: Ethics for engineers
Ethics, psychology and sociology: Labour psychology and sociology
Fundamentals of law and ergonomics: Fundamentals of law for engineers
Fundamentals of law and ergonomics: Industrial safety and ergonomics
History of Art and Culture
History of Contemporary Urban Design
Integrated transport systems
Introduction to transport systems
Introduction to Transportation Planning
Landscape Architecture
Physical aspects of human development: Health education
Physical aspects of human development: Physical education
Physical aspects of human development: Rehabilitation
Physical Education
Presentation: Autopresentation
Presentation: Interpersonal communication
Presentation: Rhetoric and presentation techniques
Regional Planning
Rural Architecture and Planning II
Selected aspects of human growth: Emotional Training
Selected aspects of human growth: Physical Education
Selected aspects of human growth: Relaxation Training
Spatial Planning
Theory and Principles of Urban Planning
Theory of Architecture and Urban Design: Theory of Architecture and Urban Design AF
Theory of Architecture and Urban Design: Theory of Architecture and Urban Design KL
Theory of Spatial Planning
Urban Design Survey Internship

Urban Transport

Table 48: PK: List of courses with obvious possibilities to include gender perspectives

Overview of the curricula analysis of all RPOs

This chapter demonstrates a summary of the curricula analysis of all RPOs: Within the figure and the tables it can be seen how many and which courses were assigned to already having a gender existing content (18), showing obvious (269) or implicit (303) possibilities to include gender perspectives and courses that were not assigned for having an opportunity to implement the gender dimension. All analysed courses of all the studies at all the four RPOs are summarized within this chapter.

What follows is a description, including examples, on how the gender dimension can be implemented into courses that were detected to have an obvious or implicit possibility to include gender perspectives.

After that, the last chapter discusses how to proceed with this analysis and information on the different rankings (also for the analysis of research projects).

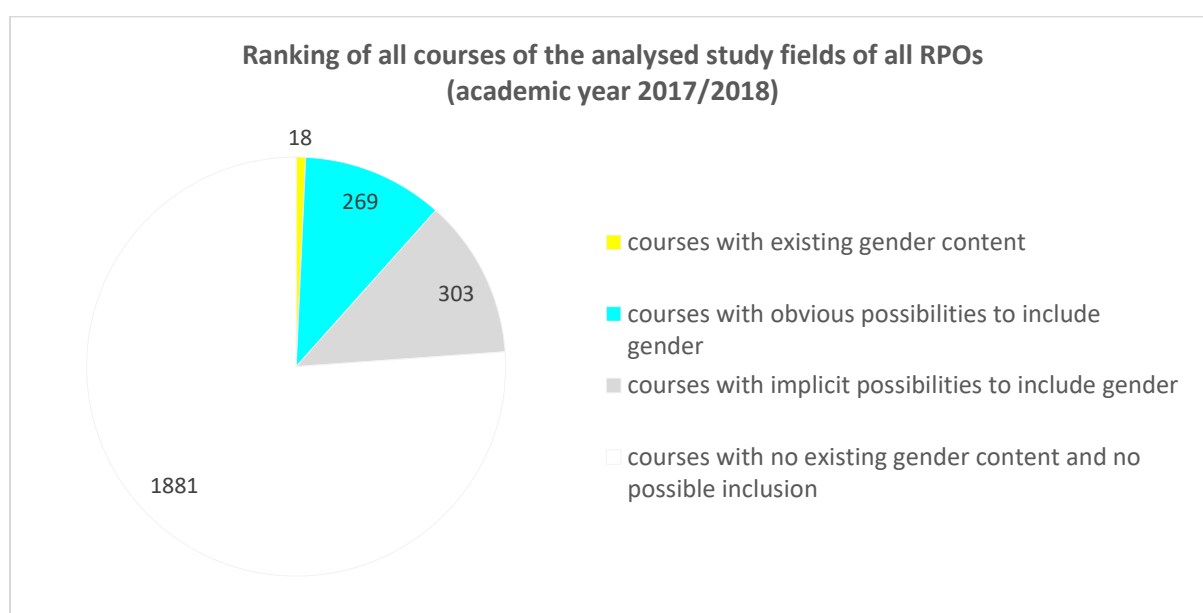


Table 49: Ranking of all courses of the analysed study fields of all RPOs (academic year 2017/2018)

List of all detected courses with existing gender content (from all RPOs)
TUW
Various out of the Elective Courses and "Transferable Skills"-Module
Various out of the Module "General Scientific Education and Interdisciplinary Qualifications"
VO Project Management
VO Technology and Society
TUW Transferable skills
SE Chain saws, codes, robots et al.: Diversity and technology development
VU Technology for People
SE What does gender have to do with technology studies?
VO Technik und Gender, Fundamentals lecture for engineering scientists
VO Developing a career - coping with obstacles
SE puzzles, knowledge, knowledge: the cultural power of the sciences
SE diversity and technology development
UPC
Commercial Activity and Urban Form
Human Preparation for Workplace
Introduction to Ict Engineering
Networking and Future Internet Opportunities
Planning and Management of Transportation
Transportation
Urban Planning and Urban Service Infrastructure

Table 50: List of all detected courses with existing gender content (from all RPOs)

List of all detected courses with obvious possibilities to include gender perspectives (from all RPOs)
TUW
LU Rehabilitation Engineering
LU Rehabilitation Technology
SE Automotive and the environment
SE Biomechanics of the Human Locomotor System
SE Biomechanics of the human musculoskeletal system
SE Car Design
SE Communication and rhetoric
SE Communication Networks Seminar
SE Communication techniques
SE Didactics in computer science education
SE Ecodesign, Sustainable Product Development
SE Group Dynamics
SE Leadership Competency Coaching 1
SE Organization and Strategic Management
SE Rehabilitation Engineering
SE Rehabilitation Technology
SE User Interfaces Seminar
UE Communication and Presentation
UE Engineering Design and Development of New Products

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UE Human Resource Management and Leadership
UE Life and health insurance mathematics
UE Life insurance mathematics
Various out of the Module "Group Occupational Field Orientation"
VO Anatomy and Histology
VO Assistive Technologies 1
VO Assistive Technologies 2
VO Automotive Engineering
VO Biology
VO Cardiovascular System Dynamics
VO Developing a career - coping with obstacles
VO Engineering Design and Development of New Products
VO Foundations of Operations and Business Management
VO Human Resource Management and Leadership
VO Human-Machine Interaction
VO Introduction to Philosophy of Science 1
VO Life and health insurance mathematics
VO Life insurance mathematics
VO Logistics
VO Macroeconomics for WIMB
VO Modelling of the musculoskeletal system
VO Modelling of the Human Locomotor System
VO Molecular Biology of the Cell
VO Physiology and Basics of Pathology
VO Presentation, Moderation und Mediation
VO Prosthetics
VO Quality Management in Service
VO Rail Vehicle Construction
VO Rehabilitation Technique
VO Rehabilitation Technology
VO Technology for people for TM
VO Theory and Practice of Group Work
VU Advanced life insurance mathematics
VU Communication and Moderation
VU Cooperative Work
VU Engineering sociology and technology psychology
VU Fundamentals of Organization
VU Fundamentals of Work Science
VU Managing People and Organizations
VU Organization Theory
VU Practical application of FE methods
VU Product Lifecycle Management
VU Research Methods
VU Rhetoric, body language, reasoning training
VU Softskills for technicians

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VU Strategic Management
VU Teambuilding and Leadership
VU Techniques of Presentation and Negotiation
TUW Transferable skills
VO Impact of technological development - Introduction to the theory and practice of technology assessment (TA)
VU Values as Leadership Tool
VU Value-based development of organizations
VU The Global Agenda - Global Learning
VU Softskills for technicians
VU Project Team Leadership and Conflict Management
VU Management and Leadership
VU Leadership Simulation
VU Inspirational Leadership in the 21st century
VU Basic Skills dealing with organizations
VO Creativity Engineering
UE Multidisciplinary Planning
SE Team-Coaching
SE Successful Team Work
SE Structured Problem Solving and Negotiation
SE Social skills for tutors
SE Social Skills
SE Rhetorical communication
SE Mediativ competence in Civil Engineering Practice 2
SE Mediativ competence in Civil Engineering Practice 1
SE Leadership Competency Coaching 2
SE Leadership Competency Coaching 1
SE Group dynamic seminar
SE Group Dynamics
SE Ecological aspects in building design
SE Career Planning and Self-Management
SE Accompanying seminar for mentors of the TUW mentoring program
PR IT Projects for Youth
VO Presentation, Moderation and Mediation
VU Rhetoric body language and training in assertiveness and argumentation
VU Negotiation technique and psychology
VU How to Illustrate Engineering by Means of Audiovisual Media
VU Getting agreement in negotiations
VU Applied Environmental Psychology
VO Understandable Science Teachings in Children's University
VO Presentations II
VO Presentations I
VO Economics of attention
UE Presentation, Moderation and Mediation
SE Rhetoric, elocution and means of expression

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SE Communication techniques
SE Elocution with video analysis
SE Communication and rhetoric
VO Technology exploitation
VU Technology Marketing
VU Product Development based on the Example of Robots
VU Innovation Lab
VU Global Strategy, Markets and Politics
VU Entrepreneurship Lab
VU Contract and liability law
VO Lecture Series Ecology
VO Public European and Austrian Economic Law
VO Private Law
VO Marketing Basics
VO Management for civil engineers
VO Management and Leadership in Innovative Companies
VO Legal issues in ecology
VO Intellectual property law
VO Industrial property rights for technicians
VO Expert law
VO European Union - Institutions, Policies and Future Challenges
VO European Technology Law
VO Entrepreneurship for innovative corporations and high-tech start-ups
VO Ecology and Sustainable Development
UE Organisational Lab
VU E-Tutoring, Moderation of E-Learning
VU Searching prior art based on patent applications
VU Further Education and Lifelong Learning
VU The TU Talente program for students in master and doctoral studies
VU The TU Talente program
VU Communicating Science
VU Barrierfree Buildings
VO Sustainability Challenge
VO Relativity for the non-specialist
VO Real Estate Management and tenancy
VO Planning of IT Projects and Public Procurement Law
VO Management questions and automation
VO Management of apartments in real property and essential features in the benefits to the public of apartments
VO How Science Inspires Science Fiction
VO Foundations of scientific work
VO Ecological and Social Aspects in Chemistry
VO Design for all
VO Aspects of Radiation Physical Concepts and Socio-Economic Concepts in Radiation Protection
UE Barrierfree Buildings

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TU Vienna alumni club excursion
SE Science and the quest for knowledge
SE Mentoring - Mathematics (FaMe)
SE Empirical-scientific view, conditions
SE Empirical-scientific view
UPC
Activities and Architecture in the City
Advanced Human Languages Technologies
Albert Einstein and Science and the Technique of the 20th Century
Anthropology of the City
Anthropology of the City. the City as a Framework of the Culture of Living Seminar
Basic Engineering Project
Basis for Theory
Building News Landscapes
Cities in History
Climate and Climate Change
Contemporary Architecture
Contemporary Architecture: Learning Today, Building Today
Create Your Future: Just a Job or Your True Passion
Culture, Technology and History in China and Japan
Debates on Technology and Society
Designing Structural Public Space Seminar
Economy, Business and Legislation
Engineering of the Product
Environment and Environmental Impact
Environmental Economics, Legislation and Policy
Environmental Engineering
Free Software and Social Development
History of Computing
History of Spanish Architecture (XIX-XX)
History of Western Art I
History of Western Art II
Housing and Cooperation
Housing and Sustainability: Physical Rehabilitation and Social and Urban Regeneration
Human Resources
Implementation and Management of Green Spaces
Information Technology Service Management
Infrastructure, City and Architecture Seminar
Infrastructure, City and Architecture Seminar I
Infrastructure, City and Architecture Seminar II
Innovation Based Service Management
Internet and Networked Economy
Introduction to Research 1
Introduction to Research 2
Introduction to Research 3

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Landscape Design
Landscape History and Composition
Life-Cycle Assessment of Products and Processes
Management of Telecommunications Projects
Marketing, Technology and Management Skills
Middle East Tour
Myths and Architecture in Western
Projects and Business Organisation
Project Management
Public Space/Urban Design
Roads and Railways
Social and Environmental Issues of Information Technologies
Socio-Environmental Statistics and Decision-Making
Space: Unity and Privacy
Start-Up Initiation: Theory and Strategy
Sustainability and Development Engineering
Technological and Scientific Development in Antiquity. Egypt and Middle East
Technology and Culture
The Origins of Modern Engineering
The Role of Science and Technology in Contemporary Culture
Theory and Practice of Urban and Building Design
To Build Communities Seminar
To Build Communities Seminar I
To Build Communities Seminar II
Transports
Urban Design I
Urban Design II
Urban Design III
Urban Design IV
Urban Design V
Urban Design VI
Urban Infrastructures and Services
Urban Management
Urban Metabolism and Ecological Urbanism
Urban Mobility
Urbanism
Work Placement
UNIRC
Advanced Transport Infrastructure Design
Airport and Heliport Infrastructures & Rail Infrastructures
Land use and Transport
Railway infrastructures and intermodal nodes
Sanitary Environmental Engineering

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Transportation Systems Engineering
PK
Architecture and Urban Design
Architecture and Urban Design: Architecture and Urban Design AF
Architecture and Urban Design: Architecture and Urban Design KL
Basics of economics and marketing
Basics of psychology and sociology
Construction Supervision, Occupational Safety and Health
Contemporary Architecture
Elective Humanistic Course: Interpersonal Communication
Elective Humanistic Course: Macroeconomics Foundations of Economic Policy (Modern Challenges)
Elective Humanistic Course: Principles of Macroeconomics (the Current European context)
Ergonomics in transport
Ethics
Ethics, psychology and sociology: Ethics for engineers
Ethics, psychology and sociology: Labour psychology and sociology
Fundamentals of law and ergonomics: Fundamentals of law for engineers
Fundamentals of law and ergonomics: Industrial safety and ergonomics
History of Art and Culture
History of Contemporary Urban Design
Integrated transport systems
Introduction to transport systems
Introduction to Transportation Planning
Landscape Architecture
Physical aspects of human development: Health education
Physical aspects of human development: Physical education
Physical aspects of human development: Rehabilitation
Physical Education
Presentation: Autopresentation
Presentation: Interpersonal communication
Presentation: Rhetoric and presentation techniques
Regional Planning
Rural Architecture and Planning II
Selected aspects of human growth: Emotional Training
Selected aspects of human growth: Physical Education
Selected aspects of human growth: Relaxation Training
Spatial Planning
Theory and Principles of Urban Planning
Theory of Architecture and Urban Design: Theory of Architecture and Urban Design AF
Theory of Architecture and Urban Design: Theory of Architecture and Urban Design KL
Theory of Spatial Planning
Urban Design Survey Internship
Urban Transport

Table 51: List of all detected courses with obvious possibilities to include gender perspectives (from all RPOs)

List of all detected courses with implicit possibilities to include gender perspectives (from all RPOs)
TUW
Bachelor Thesis
Final Exam
LU The engine muscle
LU The Motor 'Muscle'
LU Tissue Biomechanics
Master Thesis
Module Project Work
PR Project with bachelor thesis
SE Emerging Devices
SE Entrepreneurship and Innovation
SE Logistics Management
SE Quality Management
SE Risk Management
SE Seminar Energy Economics and Environment
SE Seminar Energy Industry and Environment
SE Seminar for Master and PhD students
SE Seminar in Car and Environment
SE Seminar with seminar paper
SE Tissue Biomechanics
Selected chapters of Econometrics (AKOEK)
Selected chapters of Economics (AKVWL)
Selected chapters of Operations Research (AKOR)
UE 3D Vision
UE Game Theoretic Modelling
UE Higher design theory and product development
UE Introduction to Digital Image Processing
UE Introduction to Statistics
UE Measure and Probability Theory 1
UE Measure and Probability Theory 2
UE Medical Image Processing
UE Modelling and Visualization 1
UE Modelling and Visualization 2
UE Presentation, Moderation und Mediation
UE Production and Quality Management 2
UE Quality Management in Product Development
UE Tissue Biomechanics
UE Video Processing
UE Virtual Product Development
VO Accident Biomechanics
VO Aircraft Design
VO Applied Process Management
VO Automotive Acoustics and Noise Control

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VO Brain Modelling
VO Business Law
VO Criteria of future automobiles I
VO Criteria of future automobiles II
VO Design of Handling Equipments
VO Design of Machine Tools
VO Energy Systems and Networks
VO Environment protection
VO Fundamentals of Business Management
VO Game Theoretic Modelling
VO Higher design theory and product development
VO Injury Mechanics
VO Insurance business management 1
VO Insurance contract law
VO Insurance supervision law
VO Introduction into Biophysics
VO Introduction to Biomaterials and Tissue Engineering
VO Introduction to Statistics
VO Maintenance and Reliability Management
VO Measure and Probability Theory 1
VO Measure and Probability Theory 2
VO Medical Computer Vision
VO Medical Image Processing
VO Medical Physics of Diagnostic Imaging
VO Modelling and Methods in Bioprocess Development
VO Modelling and Visualization 1
VO Modelling and Visualization 2
VO Modern Quality Strategies
VO Product Development, Innovation and ECO-Design
VO Product Management
VO Production and Quality Management 1
VO Production and Quality Management 2
VO Project Management
VO Quality Management in Product Development
VO Social security law
VO The Motor 'Muscle'
VO Virtual Product Development
VU Digital Communications 1
VU Digital Communications 2
VU E&I Garage - Business Model Development
VU Energy Economics
VU Energy Industry and Environment Deepening
VU Energy Management and Environment Deepening
VU Energy Models and Analysis
VU Enterprise Risk Management - Basics

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VU French for Engineers I
VU Innovation Management and Marketing
VU Innovation Theory
VU Innovative Building Services
VU International Negotiations
VU Introduction to Biomechanics
VU Introduction to the study of mechanical engineering
VU Italian for engineers I
VU Machine Vision und Cognitive Robotics
VU Modeling and Solving Constrained Optimization Problems
VU Modern Methods in Production Management
VU Operational cost accounting
VU Operations Management
VU Optimization in Business and Economics
VU Optimization in Transport and Logistics
VU Optimization practice
VU Problem Solving and Search in Artificial Intelligence
VU Project and Process Management
VU Quality Management Tools
VU Risk management in finance and insurance
VU Risk Model Management
VU Risk-based Performance Management
VU Russian for engineers II
VU Russian for engineers I
VU Spanish for engineers I
VU Spanish for engineers II
VU Statistical Methods in Insurance
VU Technical English Communication A
VU Technical English Presentation A
VU Technical restoration of bodily functions through functional electrostimulation
VU Technical Restoration of Body Functions by Means of FES
VU Ultrasound in Nature, Engineering and Medicine
UPC
(Ang) External Practice
Academic and Professional Speaking Skills
Academic Skills for Developing a Project
Architectural Representation I
Architectural Representation II
Architectural Representation III
Architectural Representation IV
Architectural Representation Workshop: New Approaches
Architecture and Cinema
Architecture and Cinema II
Architecture and Invention Seminar
Architecture and Invention Seminar I

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Architecture and Invention Seminar II
Architecture and Politics
Architecture as Experience Seminar
Architecture as Experience Seminar I
Architecture as Experience Seminar II
Architecture, Construction and Facilities
Architecture, Materials and Environment
Arne Jacobsen
Audio and Speech Processing
Bachelor's Thesis
Barcelona I: Walking Barcelona
Barcelona II: Designing Barcelona
Bioinformatics and Statistical Genetics
Biomechanics
Building Your Career. From Academia to Startups & Beyond
Business Analytics and Business Intelligence
Business and Economic Environment
Business and Organization Management
Business Management and Start-Up for Architects
Characterization, Management and Treatment of Waste
City Drawn by Architects
Collective Housing: Precedents, Current Developments and Alternatives
Computer Games. Structure and Development
Constructions and Industrial Architecture
Critical Thinking and Creativity
Data Analysis and Information Exploitation
Data Analysis for Business and Industry
Data Mining
Decision and Negotiation in Industrial Engineering
Deep Learning for Speech and Language
Design Project Technical Innovation: Case Study
Digital Image and Video Processing
Digital Speech and Audio Processing
Digital Strategy for Organisations
E-Business
Ecology and Environmental Management Systems
Ecomaterials and Sustainable Construction
Economics and Business
Economics and Business Administration
Economics and Management
Electric Mobility
Energy and Environment
Energy Systems and Component
Entrepreneurship
Entrepreneurship in the Agri-Food Sector

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Environmental Architecture. Energy Saving
Environment and Architectural Parameters: a Projectual Method
Environmental and Ecological Economics
Environmental Architecture: Energy Saving
Environmental Engineering and Energy
Environmental Modelling
Environmental Systems
Environmental Technology and Sustainability
Environmental Valuation and Policy
Financial Engineering for Economic Planning of Investments
Financial Topics for Entrepreneurship
Food Industry and Environment
Future (Inter)Net(Works)
Future Trends in Mobile Communications
History I
History II
History of Invention and Technological Innovation
ICT Entrepreneurship Project
Ictd. Technology for Sustainable Development
Image and Video Processing
Industrialized Construction and Innovation
Information Systems
Information Systems for Organisations
Integrated Environmental Assessment of Building Materials
Internet Transport, Control and Management
Internships in companies
Law and Management in Architecture
Life-Cycle Analysis and Sustainability Assessment
Management of Environmental Projects
Management Systems
Market Analysis and Agricultural Valuation
Marketing on Internet
Master's Thesis
Modeling of Environmental Systems
Models and Tools for Project and Financial Management
Models for Decision Making and Optimization in Engineering
Oral Communication in Academic and Professional English
Organisation and Management
Probability and Statistics
Project I
Project II
Road Network Planning and Operation
Speech Technologies
Statistical Tools for Social Networks and the Www
Statistics

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Structural Management
Structural Projects in Architecture
Sustainability Dimensions: Environmental Parameters in Architectural Design
Systems and Tools of Environmental Management
Technical Writing
Telecommunication History
Territory and Landscape
The History of Applied Mathematics in Engineering
The Urban Reform
Tools for the Planning and Management of Projects
Urban Policies
Urban Regeneration and Reconversion Seminar
Urbanism and Ecology. Concepts, Strategies and Projects
Viability of Business Projects
Videogames
Writing Skills for Engineering
Written Communication in English: the Bachelors'S/Master's Thesis
UNIRC
Activities in B-Infrastructure
Airport and Heliport Infrastructures
Bridges and large structures
Chemistry for Environment and Energy and
Electric, Electronic and Environmental Measurements
English
Environmental Data and Signals Processing
Environmental Impact Assessment
Environmental Technical Physics
Evaluation of environmental impact
Final project
Internship
Project Management
Road Constructions I & Road Constructions II
Road Constructions I and Environmental Impact Assessment
Safety Model & Environmental Geotechnics
Safety models
Technical Architecture
Technics of Environmental Control
Technique and Economy of Transport
PK
Company Management
Conservation of Monuments and Revalorisation
Decision-making theory
Design Internship
Diploma Design
Diploma Seminar

D6.1 Analysis of Current Data on Gender in Research and Teaching

Diploma Seminar II
Ecology
Ecology, Environment Protection
Economics and Project Management
Elements of Law in Engineering Practice
Engineering diploma project
Environment Protection in Civil Engineering
Environmental protection in transport
Foreign language: English
Foreign language: French
Foreign language: German
Foreign language: Polish
Foreign language: Russian
Fundamentals of enterprise: Business economics
Fundamentals of enterprise: Fundamentals of invention
Fundamentals of enterprise: Fundamentals of management
Individual activity: Diploma seminar I
Individual activity: Mid-course project
Individual activity: Scientific project
Individual activity: Students research activity
Introduction to Civil Engineering
Large scale European projects
Metrology
Optional modules: Environmental protection
Optional modules: Renewable natural energy sources
Organization and management
Physical Education
Preparation of Diploma Project
Probabilistic methods
Professional training
Protection of Historical Urban Complexes
Special Elective Classes
Specialist Consultations
Statistics / Distribution and transforms
Theory of probability / Variational analysis
Thesis

Table 52: List of all detected courses with implicit possibilities to include gender perspectives (from all RPOs)

How to proceed

Yellow marked projects and courses

- Get in contact with the researchers being responsible for the H2020-projects and with the lecturers who conduct the courses ranked in yellow → share experiences; include them in the GEP process at the RPO

Turquoise marked projects and courses

- As for the turquoise H2020 projects: conduct an in-depth analysis of preliminary results → discuss your results with project/task leaders
- As for the turquoise courses → get in touch with the lecturers, organise gender-in-research (basic) trainings with/for them, provide an overview on the (grey) gender-in-research-content related body of literature and good practices

Grey marked projects and courses

- As for the courses highlighted in grey: prepare training/supporting material for the lecturers how to integrate gender knowledge and how to integrate gender dimensions in their courses → setting up a network step by step; build up alliances
- As for example foreign language courses gender perspectives could be included, when analysing gender issues in a foreign language or learn how to speak and write that language in a gender sensitive way - so teachers could work on gender contents or demonstrate gender mainstreaming in a didactic and implicit way.

Annexe

Curricula TU Wien

Faculty Electrical Engineering

Bachelor programme Electrical Engineering and Information Technology:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=3962&dsrid=x03&key=58908>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=5806&dsrid=892&key=58908>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/BachelorstudiumElektrotechnikundInformationstechnikE033235.pdf

Master programme Embedded Systems:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=6285&dsrid=x72&key=66304>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=8607&dsrid=x46&semesterCode=20x7W&semester=YEAR&key=66304&viewAcademicYear=true>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/MasterstudiumEmbeddedSystemsE066504.pdf

Master programme Energy Systems and Automation Technology:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=6777&dsrid=3x2&key=65354>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=4070&dsrid=237&key=65354>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Aktuelle_Curricula_20x3/Mas_EnergieundAutomatisierungstechnik.pdf

Master programme Telecommunications:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=79x4&dsrid=229&key=65355>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=4767&dsrid=468&key=65355>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Aktuelle_Curricula_20x3/Mas_Telecommunications.pdf

Master programme Microelectronics and Photonics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=8x9x&dsrid=6x&key=65356>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=3537&dsrid=3x8&key=65356>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Aktuelle_Curricula_20x3/Mas_Mikroelektronik_und_Photonik_0x.pdf

Faculty for Mechanical Engineering

Bachelor programme Mechanical Engineering:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=9396&dsrid=776&key=37x73>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=3688&dsrid=x00&key=37x73>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/BachelorstudiumMaschinenbauE033245.pdf

Master programme Mechanical Engineering:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=8725&dsrid=x99&key=59x38>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=x806&dsrid=8x0&key=59x38>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/MasterstudiumMaschinenbauE066445.pdf

Bachelor programme Mechanical Engineering - Management:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=9883&dsrid=4x9&key=37649>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=8407&dsrid=922&key=37649>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/BachelorstudiumWirtschaftsingenieurwesenMaschinenbauE033282.pdf

Master programme Mechanical Engineering - Management:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=2487&dsrid=766&key=4465x>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=5652&dsrid=76&key=4465x>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/MasterstudiumWirtschaftsingenieurwesenMaschinenbauE066482.pdf

Biomedical Engineering

Master programme Biomedical Engineering:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=6786&dsrid=64&key=42680>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=6554&dsrid=924&key=42680>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x6/Geringfuegige_AEnderungen/MScBiomedicalEngineering.pdf

Faculty for Mathematics

Bachelor programme Technical Mathematics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=3599&dsrid=375&key=63529>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/BachelorstudiumTechnischeMathematikE03320x.pdf

Bachelor programme Statistics and Mathematics in Economics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=4892&dsrid=499&key=36058>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=5070&dsrid=462&key=36058>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/BachelorstudiumStatistikundWirtschaftsmathematikE033203.pdf

Bachelor programme Financial and Actuarial Mathematics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=6393&dsrid=894&key=36x86>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=85x4&dsrid=428&key=36x86>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Oktober_20x7/BachelorstudiumFinanz-undVersicherungsmathematik033205.pdf

Master programme Technical Mathematics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=48x6&dsrid=978&key=64485>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=9x5x&dsrid=49x&key=64485>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Aktuelle_Curricula_20x3/Masterstudium_Technische_Mathematik.pdf

Master programme Statistics and Mathematics in Economics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=x694&dsrid=493&key=64486>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=637x&dsrid=352&key=64486>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Aktuelle_Curricula_20x3/Mas_Statistik_und_Wirtschaftsmathematik.pdf

Master programme Financial and Actuarial Mathematics:

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=8882&dsrid=823&key=39925>

<https://tiss.tuwien.ac.at/curriculum/public/curriculum.xhtml?dswid=3664&dsrid=469&key=39925>

https://www.tuwien.ac.at/fileadmin/t/studabt/downloads/Studienplaene/Aktuelle_Curricula_20x3/Mas_Finanz_u_Verischerungsmathematik.pdf

Curricula UPC

Bachelor Industrial Technology Engineering:

<http://www.upc.edu/en/bachelors/industrial-technology-engineering-barcelona-etseib>

Master Industrial Engineering:

<https://muei.etseib.masters.upc.edu/en/general-information>

Bachelor Informatics Engineering:

<https://www.fib.upc.edu/en/studies/bachelors-degrees/bachelor-degree-informatics-engineering>

Master in Innovation and Research in Informatics:

<https://www.fib.upc.edu/en/studies/masters/master-innovation-and-research-informatics>

Bachelor's degree in Telecommunications Technologies and Services Engineering

http://etsetb.upc.edu/en/study-programs/degrees/bachelors-degree-in-telecommunications-technologies-and-services-engineering?set_language=en

Master Telecommunications Engineering:

<http://www.upc.edu/en/masters/telecommunications-engineering-met>

Bachelor Agricultural, Environmental and Landscape Engineering:

<http://www.upc.edu/en/bachelors/agricultural-environmental-and-landscape-engineering-castelldefels-esab>

Master Architecture:

<http://www.upc.edu/en/masters/architecture-barcelona-etsab>

Bachelor Architecture Studies:

<http://www.upc.edu/en/bachelors/architecture-studies-barcelona-etsab>

Bachelor Civil Engineering:

<http://www.upc.edu/en/bachelors/civil-engineering-barcelona-etseccpb>

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Master Civil Engineering:

<http://www.upc.edu/en/masters/civil-engineering>

Master Environmental Engineering:

<http://www.upc.edu/en/masters/environmental-engineering>

Curricula UniRC

Bachelor Civil and Environmental Engineering:

3 Curricula: Environmental Engineering, Civil Engineering, Energy Engineering

in English: <http://www.unirc.it/en/undergraduate.php?cdl=340>

in Italian: http://www.diceam.unirc.it/corsi_laurea_triennale.php?uid=7256exx8-abde-4x3d-a7c4-e5406f48e6x0

Master Environmental Engineering:

2 Curricula: Protection of lands and environment, low-impact production

in English, only first years inserted for now: <http://www.unirc.it/en/undergraduate.php?cdl=342>

in Italian, complete info about the two-years courses:

http://www.diceam.unirc.it/corsi_laurea_magistrale.php?uid=ba5c0d0d-da05-467d-900d-9477d35f9cx8

Master Civil Engineering:

2 Curricula: Hydraulics Engineering, Structure and Geotechnical Engineering

in English, only first years inserted for now: <http://www.unirc.it/en/undergraduate.php?cdl=34x>

in Italian, complete info about the two-years courses:

http://www.diceam.unirc.it/corsi_laurea_magistrale.php?uid=b2dfc55e-x7c9-439d-afdx-c9cefa3dd6e0

Master Design of Infrastructure and Transport Systems (Specialization of Civil Engineering):

http://www.diceam.unirc.it/corsi_laurea_magistrale.php?uid=b2dfc55e-x7c9-439d-afdx-c9cefa3dd6e0

Curricula PK

Bachelor Mechanical Engineering (Speciality: Advanced Computational Mechanics):

<http://syllabus.pk.edu.pl/plan/show/html.pk?id=2724>

Master Mechanical Engineering (Speciality: Advanced Computational Mechanics):

<http://syllabus.pk.edu.pl/plan/show/html.pk?id=2735>

Bachelor Civil Engineering:

<http://syllabus.pk.edu.pl/plan/show/html.pk?id=2460>

Master Civil Engineering (Building and engineering constructions):

<http://syllabus.pk.edu.pl/plan/show/html.pk?id=2475>

Master Architecture:

<http://syllabus.pk.edu.pl/plan/show/html.pk?id=2445>

Bachelor Transportation Planning:

Abstracts of all H2020 research projects with existing gender content

TUW

H2020 research projects of TUW with existing gender content	
Project	Abstract
ACROSSING	<p>Smart Home (SH) provides a promising approach to assisted living for the ageing population. Yet it still remains a challenge to develop and deploy such solutions in a large scale due to the lack of an easy-to-use technology infrastructure and application exemplars. This problem arises from the nature of the SH field: multidisciplinary, diverse in its applications, and with multiple stakeholders. Whilst a one-size-fits-all technology infrastructure seems unlikely, alternatives are still missing. In addition, an effective approach to cross-discipline, cross-sector understanding for best practices has so far not been seen. ACROSSING addresses this problem by implementing a multidisciplinary cross-sector pan-European training network to knock down barriers between disciplines and sectors and providing the ESRs with a broad training experience. ACROSSING develops 15 topically complementary research projects covering four core research themes, and four main application categories. By multidisciplinary collaborations and cross-sector interactions, the ESRs will develop flexible, interoperable underlying technologies which are then applied to and evaluated in multiple real application scenarios, leading to four specialised technology infrastructures and four best-practice application demonstrators. ACROSSING also deliver comprehensive blended training by combining campus-based and industrial practice training, and perspectives on personal development and social issues by well-established researchers and practitioners from academic, industry and user organisations. Whilst the scientific focus is to challenge the traditional way of SH research to develop advanced technologies and platforms, the training will train ESRs to establish links between research, real-world problems, innovation and personal career. ACROSSING will share software and datasets using open source technologies, and promote findings and impact through a number of measures, e.g. online, outreach events.</p>
EoC	<p>"This project responds to the ICT-35-2016 Enabling responsible ICT-related research and innovation, topic B, and will "reflect and challenge the way ICT-related research and innovation is currently approached." The computerization of society in the late 1970s has now reached a point where the global economy works through an algorithmic networked environment. This situation is addressed in this research as an algorithmic condition. Any form of ICT operates within this condition. The question is, what are the ethical codes and guidelines that guide research within this condition? The Ethics of Coding prepares research that will provide an indexical report on the conceptual and thematic issues of ICT- related research and innovation, which will suggest what an ethics for ICT related issues could be, and how that might be implemented in relation to actualized and possible ICT projects. In addition, the research addresses the extent to which the coding of the social, ethical, and pedagogic, is always already invested in the maintenance of power relations that control the economic conditions for knowledge (which regulate the global markets) with what Wendy Chun (2011) describes as a "code logos." Working with the Philosopher of the human condition of the twentieth century; Hannah Arendt (1958; 1978), an inter-disciplinary think-tank research team brings Arendtian ethical philosophy into dialogue with SSH experts from a number of disciplinary fields, including thinkers of technologies and their effects on societies, philosophers of mathematics, gender and humanities experts, educational philosophy specialists, digital media thinkers, to produce a report that reflects the expression of the human algorithmic condition. The project is committed to engaging with a broad range of stakeholders to substantiate its approach and the resources requested include a substantial budget to facilitate the participation of external experts in the EoC colloquia and the final project event."</p>

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ER4STEM	<p>Many children lose their natural curiosity for how things function and interrelate to each other along the way into their lives as young adults. The Educational Robotics for STEM (ER4STEM) project aims to turn curious young children into young adults passionate about science and technology with a hands-on use case: robotics. The domain of robotics represents a multidisciplinary and highly innovative field encompassing physics, maths, informatics and even industrial design as well as social sciences. Moreover, due to various application domains, teamwork, creativity and entrepreneurial skills are required for the design, programming and innovative exploitation of robots and robotic services. Children are fascinated by such autonomous machines. This fascination and the variety of fields and topics covered make robotics a powerful idea to engage with. Young girls as well as boys can easily connect robots to their personal interests and share their ideas through these tangible artefacts.</p> <p>ER4STEM will refine, unify and enhance current European approaches to STEM education through robotics in one open operational and conceptual framework. The concept is founded on three important pillars of constructionism: 1. engaging with powerful ideas, 2. building on personal interests, and 3. learning through making (or presenting ideas with tangible artefacts). The ER4STEM framework will coherently offer students aged 7 to 18 as well as their educators different perspectives and approaches to find their interests and strengths in robotics to pursue STEM careers through robotics and semi-autonomous smart devices. At the same time students will learn about technology (e.g. circuits), about a domain (e.g. math) and acquire skills (e.g. collaborating, coding). Innovative approaches will be developed to achieve an integrated and consistent concept that picks children up at different ages, beginning in primary school and accompany them until graduation from secondary school.</p>
GEECCO	<p>GEECCO aims to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs are located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies. It is thus a question of excellence, competitiveness and justice to achieve gender equity within STEM-institutions, including policy and decision making bodies. Concerning the gender dimension in research programmes RFOs are the key to substantial changes and thus a crucial part of the aspired transformation. GEECCO will pursue the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field: (i) Setting up change framework and a tailor-made GEP for each participating RPO; (ii) Implementing gender criteria in the activities of RFOs; (iii) Setting up a self-reflective learning environment in and between all RPOs und RFOs to participate from existing experiences and match them with their specific needs and circumstances. Facilitators will build up appropriate communication structures and processes within the RPOs and RFOs. They will enable the RPOs and RFOs to help themselves in the longer term dealing with internal resistances against gender equality. (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project. GEECCO will develop the “GEECCO Experience: Dos and Don’ts while Degenderizing the STEM Field”, a guideline for RPOs and RFOs in the STEM field how to promote gender equality in the STEM field and intends to participate in standardization processes at EU level to measure “gender balance performance” of RPOs and RFOs.</p>
Photo-Emulsion	<p>The polymer industry is going through one of the most significant periods of change in its history. Driven by new environmental regulations, the development of eco-efficient processes and zero-VOC products has become an absolute necessity. In this field, 2 technologies stand out: Polymerisation in dispersed media and Photopolymerisation. To maintain EU leadership in this sector, PHOTO-EMULSION aims at training a creative, entrepreneurial & innovative next-generation of 8 Early-Stage Researchers (ESRs) who can push towards new eco-friendly polymerisation processes. Our primary strength is a demanding technical knowledge base bringing together, for the first time, all disciplines related to these 2 strategic fields. Secondly, we will broaden traditional doctoral training by targeting transferable and specialized skills sought after by the employers, and learned through innovative methods: tandem ESRs, distance language learning, ESR as itinerant</p>

D6.1 Analysis of Current Data on Gender in Research and Teaching

	<p>science educator, online courses, ESR-led subproject, highly interactive meetings, and industrial secondments. In research, we will develop a “hybrid” next-generation technology based on thiol-ene photopolymerisation in dispersed media. Advanced manufacturing based on photoreactor promises a wave of high sulfur content dispersed products (films, nanoparticles, porous network). Their outstanding properties open the door to applications responding to current Industrial needs such as non-leaching materials, O₂ barrier and biobased waterborne coatings, biologically-active particles, hybrid nanosensors and monolithic chromatography column. PHOTO-EMULSION involves a high-quality research network including 8 internationally reputed academic institutions, 4 leading companies and 2 non-profit organisations. Balanced & EU-wide, our diversity expresses through the participation of 8 countries (Austria, France, Germany, Ireland, Poland, Slovenia, Sweden & Spain), 50% female scientists-in-charge, and structures supporting gender equality.</p>
SAFERUP	<p>Urban pavements comprise almost 40% of European cities and are the main means by which people travel every day. Urban pavements must accommodate all users in the most efficient, safe, sustainable and smart way. A key factor to increase the liveability of tomorrow’s Smart cities will be transforming the way urban pavements are perceived, designed, built, maintained and function. SAFERUP! aims to provide cities with innovative solutions that will form the future urban paved environment, by training talented researchers in the fields of: smart, recycled and durable paving materials; provision for vulnerable users (e.g. elderly & disabled) accessibility and protection; studying user behaviour; life cycle analysis; wash-off water management and bioremediation; tempered and acoustic pavements; energy harvesting and self-sensing technologies. The SAFERUP! Consortium believes in this future and has created a unique team of world leading commercial and academic research engineers and scientists, with the diverse range of expertise needed to develop the novel solutions required to deliver this future and its anticipated benefits. Fifteen ESRs will undertake their PhDs in a research and training programme designed to optimise their multidisciplinary and cross-sectoral experience through secondments and a variety of SAFERUP!-wide fora. All ESRs’ projects are interrelated and considerable synergies, trans-project contributions and collaborations will occur. A key focus of the training will be career planning, entrepreneurship and skills development in particular communication. SAFERUP! participants with communication expertise will develop the communication and dissemination strategy to maximise the exploitation of the developed solutions. SAFERUP! will create a new generation of professionals with multidisciplinary expertise in urban pavements and allied fields appealing to employers, who will expand the social benefits of the new urban pavements well beyond the end of SAFERUP!</p>
SUNRISE	<p>SUNRISE will develop, implement, assess and facilitate learning about new, collaborative ways to address common mobility challenges at the neighbourhood level. Towards this aim, 6 cities will foster collaborative processes in specific neighbourhoods as “Neighbourhood Mobility Labs” with the explicit mandate to implement innovative solutions for and with their residents, businesses etc.</p> <p>SUNRISE rests on several pillars: A) Utilisation of neighbourhood-specific opportunities. B) Co-creation of solutions, i.e. through strategic civic-public alliances C) Socio-technical nature of solutions as combinations of services, social arrangements, rules, technologies or small infrastructures etc. D) New forms of synergies between bottom-up and top-down.</p> <p>All SUNRISE activities are structured along the following phases of the innovation chain: 1) Co-identification of mobility problems; 2) Co-planning / co-selection of solutions; 3) Co-implementation of solutions; 4) Co-evaluation; 5) Co-learning and uptake.</p> <p>The SUNRISE action neighbourhoods will use a blend of proven state-of-the-art online and face-to-face participation techniques and will establish longer-term collaborative forums. These will systematically involve citizens, businesses, NGOs, local authorities, academics etc. – always with a view to also involve under-empowered sections of the population like migrants, women, older and young people.</p> <p>Alongside the mobility benefits for the action neighbourhoods, the project will result in a suite of products – most prominently the SUNRISE Neighbourhood Mobility Pathfinder – which will be provided to European cities, their stakeholders and citizens through a powerful exchange process to inspire and inform change across Europe. This will include a group of 20 Take-Up neighbourhoods and various city networks in cooperation with CIVITAS.</p>

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	In strategic terms, SUNRISE will lay the foundation for a Sustainable Neighbourhood Mobility Planning concept (SNMP) to complement SUMP.
TEAM	<p>There is no health without mental health. 27% of our population are young, and mental health disorders are our leading cause of disability. 50% of mental disorders emerge by 14 yrs, 75% by 24 yrs and, untreated, triple odds of having a mental health disorder in later life. TEAM's will build a network of expertise and train a new generation of researchers to deliver more effective, affordable and feasible mental health services for young people. Our interdisciplinary, international, intersectoral network, balanced in skills, experience and perspectives, will train the next generation of researchers to lead Youth Mental Health (YMH) services into the future. Research objectives focus on key challenges in YMH: delivering new technologies to support rapid, large-scale, and early assessment, prevention and treatment. TEAM will also deliver policy directions and guidelines for technology-enabled YMH. 2 themes are covered: how can technology a) increase access, and b) help people to engage more successfully? TEAM will deliver new technology-enabled services that are both accessible and engaging for young people. Our ambitious objectives require individuals with a unique combination of interdisciplinary and intersectoral skills. TEAM ESRs will receive integrated training across three key areas necessary to fully realise the potential of technology-enabled mental health: Mental Healthcare Delivery - the theories and practice of YMH; Computer science - core principles in software engineering and technology infrastructures; Interaction Design - theories and methods including co-designing with young people and active engagement with clinicians, social workers, caregivers (e.g. parents) and teachers. Intersectoral secondments promote interdisciplinary and intersectoral learning and communication, and public engagement and outreach focus on young people, those who play major roles in their lives (e.g. parents and teachers), health care professionals.</p>

UPC

H2020 research projects of UPC with existing gender content	
Project	Abstract
CAPTOR	<p>Air pollution is the environmental topic that European citizens worry about most (Eurobarometer 2013). It puts considerable damage to health, agriculture and our natural environment. Despite these facts, the readiness and power of European citizens to take actions themselves is limited.</p> <p>The drivers of the CAPTOR project are three large civil society organizations. Being the interface between ministries for environmental issues, national and local political decision makers and the citizens, their experience evidences that the provision of data and information on air pollution to citizens in top-down and passive ways, as it happens today, is not sufficient to engage a critical mass of participating citizens required to support transitions in the systems of production and consumption that are the root cause of air pollution.</p> <p>CAPTOR combines the concepts of citizen science, collaborative learning and environmental grassroots activism to leverage the collective intelligence of existing networks of local communities, allowing them to understand reasons and consequences of air pollution; to stimulate debate; to address authorities with scientific valuable, robust data from citizens' network of monitoring stations; and to transform this discussion into solutions. It runs three big pilots in Austria, Italy and Spain, driven by grassroots activists and local communities where citizens will engage in the project on different levels to address their concerns.</p> <p>The consortium includes a balanced group of multidisciplinary partners, including: institutions with recognised experience in ICT technologies, and in environmental and social sciences; one of the largest community networks in the world; and 3 NGOs with experience in grass root environmental activism and a strong links in the territory. The project has a large impact capacity, as it is reflected by the fact that more than 82</p>

D6.1 Analysis of Current Data on Gender in Research and Teaching

	<p>stakeholders from 21 European countries have already shown interest in the proposal results.</p>
<p>CAREGIVERSPRO-MMD</p>	<p>According to the World Health Organisation (WHO, ADI), 44 million people around the world have some form of dementia, for which there is no effective intervention, to halt or reverse the progressive cognitive impairment. As Europe's population is ageing, long-term care for elderly citizens will become an increasing cost for society. To manage this transition healthcare policies in the EU and individual Member States are heavily focussed on extending the independent life of the elderly, with the dual aim of increasing their quality of life and reducing the costs of care.</p> <p>In this project, we will build a mHealth application that is specifically targeted to caregivers and patients with mild to moderate dementia. The result is CAREGIVERSPRO-MMD: a tool integrating a broader diagnostic approach, incorporating the live-in family caregiver-patient dyad and considering this dyad as the unit of care.</p> <p>CAREGIVERSPRO-MMD will provide value-added services based on social networks, tailored interventions, clinical strategies and gamification for improving quality of life for dementia's patients and caregivers that allow them to live in the community for as long as possible.</p> <p>The project will comprise three phases: first, we will develop new services for patients with mild to moderate dementia and their respective caregivers to an existing application. In the second phase, we will conduct a user-centric analysis to re-design the existing application for patients with mild to moderate dementia. The development will be steered by patients, carers and doctors, through user-centric design: we will collect feedback on each new version of the application until the design is adapted to the users' needs. In the third phase, we will pilot the optimised application with 550 dyads (patients and their respective caregivers) and 550 controls. This will show the clinical and social benefits for patients and caregivers, as well as financial benefits for the healthcare system.</p>
<p>CONNECT</p>	<p>"Networks are present in our lives in numerous different environments: to name just a few, networks can model social relationships, they can model the Internet and links between web pages, they might model the spread of a virus infection between people, and they might represent computer processors/sensors that have to exchange information.</p> <p>This project aims to obtain new insights into the behaviour of networks, which are studied from a geometric and computational perspective. Thereto, the project brings together researchers from different areas such as computational geometry, discrete mathematics, graph drawing, and probability. Among of the topics of research are enumerative problems on geometric networks, crossing numbers, random networks, imprecise models of data, restricted orientation geometry. Combinatorial approaches are combined with algorithms. Algorithmic applications of networks are also studied in the context of unmanned aerial vehicles (UAVs) and in the context of musical information retrieval (MIR). The project contains the work packages: "Geometric networks", "Stochastic Geometry and Networks", "Restricted orientation geometry", "Graph-based algorithms for UAVs and for MIR", and "Dissemination and gender equality promotion".</p> <p>The project connects researchers from 14 universities located in Austria, Belgium, Canada, Chile, Czech Republic, Italy, Mexico, and Spain, who will collaborate and share their different expertise in order to obtain new knowledge on the combinatorics of networks and applications."</p>

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EMPOWER	<p>The main objective of EMPOWER is to substantially reduce the use of conventionally fueled vehicles (CFV) in cities by influencing the mobility behaviour of CFV drivers and users towards fundamental change. To achieve this objective EMPOWER will create a set of tools for industry, policy makers and employers. These will empower them beyond the lifespan of this project to understand, help choose and successfully implement ‘positive’ evidence-based and cost-effective policy interventions, based on new and innovative mobility services, and in the context of already existing infrastructure, policy and measures. EMPOWER will reduce the use of CFV by: shifting trips to other modes/other vehicle types, promoting sharing and self-organisation and reducing demand overall e.g. through remote access to services. Undesirable impacts from CFV use will be reduced by: shifting CFV use to outside peak times and diversions to avoid particular areas/routes. The research will be multidisciplinary and involve: social science research with the public, 4 living lab experiments and 7 City demonstrators which will be chosen through an open 'bidding' process. The EMPOWER concept will be used in practice by: City stakeholders being able (through a software tool) to choose positive policy options based on their expected impacts and deliver incentives and social network sharing schemes to individuals using software. The innovation outputs of EMPOWER include an EMPOWER Toolkit to support industry, policy makers and employers to understand, choose and implement positive policy interventions. The Toolkit includes: new mobility services to provide innovative positive policy measures, new evidence on behavioural responses and impacts from positive incentives, improved organisational models for successful implementation of positive policy measures and innovation in the evaluation methodology for new mobility services. We expect at least 1 million persons to be impacted by EMPOWER.</p>
EnerGAware	<p>The main objective of the EnerGAware project is to achieve a 15-30% energy consumption and emissions reduction in a social housing pilot and increase the social tenants’ understanding and engagement in energy efficiency.</p> <p>The EnerGAware project will develop and test, in publically owned social housing, a serious game that will be linked to the actual energy consumption (smart meter data) of the game user’s home and embedded in social media and networking tools. The solution fits within all three ICT areas suggested in the topic EE-11 scope: gaming, social networking and personalised data driven applications.</p> <p>The EnerGAware solution will provide an innovative IT ecosystem in which users can design their own virtual home and Avatar and learn about the potential energy savings from installing energy-efficiency measures and changing user behaviour, whilst maintaining the comfort of their Avatar. The user will need to learn to balance the energy consumption, comfort and financial cost of their actions. Energy savings achieved both virtually in the game, calculated by building performance simulation, and in reality, in the users’ actual homes, measured through smart meter data, will enable progression in the serious game. The social media features will provide users a platform to share data of their achievements, compete with each other, give energy advice, as well as, join together to form virtual energy communities.</p> <p>The EnerGAware solution will be developed and deployed with the ‘cleanweb’ philosophy in mind: “Capital light, Quick to market and Quick to scale”, therefore the EnerGAware project will aim to go beyond just testing in a social housing pilot, but will seek commercial exploitation of the solution at the end of the project, through our industrial partners, in particular EDF Energy, a global energy provider, with 38 million European energy customers.</p>
GEECCO	<p>GEECCO aims to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs are located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies. It is thus a question of excellence, competitiveness and justice to achieve gender equity within STEM-institutions, including policy and decision making bodies. Concerning the gender dimension in research programmes RFOs are the key to substantial changes and thus a crucial part of the aspired transformation. GEECCO will pursue the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field:</p>

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	<p>(i) Setting up change framework and a tailor-made GEP for each participating RPO; (ii) Implementing gender criteria in the activities of RFOs; (iii) Setting up a self-reflective learning environment in and between all RPOs and RFOs to participate from existing experiences and match them with their specific needs and circumstances. Facilitators will build up appropriate communication structures and processes within the RPOs and RFOs. They will enable the RPOs and RFOs to help themselves in the longer term dealing with internal resistances against gender equality. (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project. GEECCO will develop the “GEECCO Experience: Dos and Don’ts while Degenderizing the STEM Field”, a guideline for RPOs and RFOs in the STEM field how to promote gender equality in the STEM field and intends to participate in standardization processes at EU level to measure “gender balance performance” of RPOs and RFOs.</p>
MInD	<p>This project aims to help people with dementia engage in social contexts to improve psychosocial wellbeing. People who are affected by Alzheimer’s disease or other dementias often face cognitive, behavioural and psychosocial difficulties, including impairment and degeneration of memory and of perceptions of identity. In a social context, this can cause difficulties of recognizing, relating to and empathising with other people. These difficulties often pose a challenge for engaging socially, reinforcing their effects and reducing personal well-being. Design can offer novel ways of complementing existing care approaches to empower people with dementia in everyday social situations. Utilising the concept of mindful design, we will investigate innovative design solutions to enable self-empowerment and confidence building of people living with dementia. We will specifically focus on two areas: personal difficulties with social interaction and environmental influences on social engagement. In these two contexts, we will study how personal, wearable designs can help mediate perceptions of identity and emotion management; and how environmental aspects can reduce feelings of information overload and instill feelings of self-empowerment and control. The outcomes and benefits of the project will include: the development of new uses of design for helping people with dementia to engage socially and improve subjective well-being; the presentation of a robust methodological co-design framework for the development and evaluation of the designs in dementia care settings; the development of a holistic mindful model of designing and of a model for mindful care for social engagement for people with dementia; policy recommendations for the inclusion of design within dementia care. This groundbreaking project will be enabled through an innovative consortium of academic and non-academic partners that combines research in product and environmental design, ICT, and dementia care.</p>
MIROR	<p>Our aim is to create, in Europe, an innovative and ambitious multidisciplinary intersectoral joint doctoral training programme, dedicated to Methods in Research on Research (MIROR) in the field of clinical research. “Research on Research”, is an emerging new scientific discipline that aims to reduce waste in research and increase research value. Waste in research represents tens of billions of Euros spent each year on studies that are redundant, flawed in their design, never published or poorly reported. The public is the main victim of this waste and reducing waste and increasing value of research represents a major societal challenge. Our proposal involving 15 early-stage researchers, aims to 1) prepare students for envisioning the future challenges in clinical research and find innovative solutions to face them, 2) train students to go well beyond the state-of-the-art in their research, 3) help students think differently, taking advantage of the multidisciplinary expertise and intercultural diversity of the network, 4) teach students how to move from research to action and convert knowledge and idea into a product, and 5) help students develop skills to match the public and private sector needs and create new professional opportunities. MIROR will bring together 7 world-class research teams in various disciplines (computer sciences, applied mathematics, biostatistics, bioinformatics, clinical epidemiology, psychology, social sciences and translational medicine) from 6 different European</p>

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	<p>countries; 6 non-academic partners involved in diverse sectors, and 4 major academic partners. We will tackle several steps of a clinical research project (planning, conduct, reporting and the peer-review); various study designs (observational studies, randomised trials, systematic reviews); various study questions (therapeutic, diagnostic, and prognostic evaluation) using various methods (meta-epidemiologic studies, qualitative studies, experimental studies, simulations etc).</p>
My-TRAC	<p>My-TRAC project aims to deliver an innovative application for seamless transport and an ecosystem of models and algorithms for Public Transport – PT user choice simulation, data analytics and affective computing. My-TRAC stands out from other technologies due to three main reasons. First, My-TRAC fosters unprecedented involvement of users during, before and after a trip through a smart Human-Machine interface and numerous functionalities such as crowdsourcing, group recommendations, data exchange. Second, the application implements a vast array of technologies, such as affective computing, Artificial Intelligence and user choice simulation, that fuse expertise from multiple fields. Third, My-TRAC facilitates engagement of multiple stakeholders by seamlessly integrating services and creating connections between Rail operators, Mobility-as-a-Service and other PT providers.</p> <p>My-TRAC application is a travel companion designed to operate similarly to a human companion; understanding traveller’s attributes and state-of-mind to derive conclusions from vague information as any human does. In addition, My-TRAC will be the traveller’s gateway to various services related to using PT, having Rail in the epicentre. My-TRAC application will also provide predictive information concerning disruptions and disturbances. It will not only display data but analyse them through innovative algorithms to provide improved recommendations.</p> <p>My-TRAC also involves PT operators through the “operators’ interface” where they can retrieve and visualize aggregated data on users’ movements and state-of-mind that will assist in strategic and dynamic operations. Data that the operators retrieve are aggregated and anonymized while all models and algorithms are applied on the mobile device of the user, seamlessly integrating the “privacy-by-design” concept.</p> <p>The consortium will test the idea in 4 pilot locations with the cooperation of local operators: NS (NL), ATTIKO Metro (GR), FGC (SP), Fertagus (PT).</p>
OPENREQ	<p>Requirements engineering is a key activity in ICT projects: What are current user needs and what requirements satisfy them? How much effort would a requirement cost and in which release should it be delivered? Which requirements can be reused from similar projects? Are there hidden dependencies or inconsistencies? What trade-offs are acceptable for users and other stakeholders? A satisfactory, efficient answer to these questions is essential for the success for nowadays software projects.</p> <p>OPENREQ leverages modern recommender algorithms, semantic technologies and data-mining to provide intelligent, proactive support for stakeholders survey alternatives and make individual or group decisions. OPENREQ focuses on complex, community-driven ICT projects with various dependencies and stakeholders as in the Telecom, Transportation, and Cross-Platform-Software domain covered in our trials.</p> <p>We will develop, evaluate and disseminate a fully integrated open-source requirements management platform and a set of connectors with the following decision-making capabilities:</p> <p>Requirements Intelligence: monitors the actual software usage, collects stakeholders’ and users’ feedback (e.g. from social media), aggregates and visualizes this information as predictive analytics.</p> <p>Stakeholder’s Personal Recommender: implements advanced recommendation and machine-learning algorithms to assist requirements work, improve a requirement’s quality, estimate its properties or predict relevant stakeholders.</p> <p>Group Decision Support: enables the stakeholders’ participation, the resolution of preference conflicts, and the identification of consensus, e.g. during release planning.</p> <p>Dependency Management: semi-automatically identifies requirements dependencies,</p>

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	<p>supports requirements reasoning and reuse of requirements knowledge. With the OPENREQ Interfaces, these capabilities will be integrated into stakeholders' workflows and tools including requirements tools, issues trackers and collaboration tools.</p>
SOMATCH	<p>The objective of the SOMATCH is to improve the competitiveness of EU SMEs in Textile and Clothing (T&C) and design focused sectors by the collection, definition and visualization by ad hoc interfaces of fashion trends. SOMATCH will provide creative designers with detailed and reliable trends estimations and forecasts of user acceptance. Its goal will be achieved by the creation of an innovative tool for the mining and visualization of large sets of unstructured data, related to the use and preferences of fashion products by consumers, supporting T&C companies quick reaction to the market dynamics and better adaptation of design to real consumers' demand.</p> <p>SOMATCH faces this complex and challenging deal by the combined development and application of SoA advanced image analysis technology, unexploited and innovative in clothing and fashion, combined with social network analysis. Its results will be presented to interested end users by dedicated interfaces and instruments: mobile devices as well as ad hoc visualization tools will be explored for this purpose.</p> <p>The visualisation of the generated data will be performed from off-line statistics, generated after data processing, and by new real-time instruments for image collection and evaluation of designs. They will be targeted also by the integration of the systems with new SoA mobile and wearable (for ex. Google Glass) devices to collect information and to visualise trend interpretation. This approach will open a vast field of new approaches for the fashion designers, supporting final users involvement into the whole trend evaluation and a close interaction with them.</p> <p>To reach this purpose Somatch consortium includes research centres expert in image and content analysis (TUM, UPC), software providers experts in data management, platform development and fashion tools (Holonix, Sparsity, Ideal), end users from SME textile industry and retail (DENA) and social networking and e-commerce (Weblogs, NJAL).</p>
SUPERSEDE	<p>The number of available software applications in the form of web services, mobile apps, etc., is dramatically increasing over the years. This software exploits data collected through various sensors, and online data sources. Its users can access it through a variety of devices, mostly based on mobile technology.</p> <p>Software providers can hardly predict the acceptance of the applications they deliver. The great diversity in execution contexts and user preferences makes it difficult to personalize the software to fit all users' needs. The complexity of those systems and the data involved turn out to be a solution to the problem and offer new opportunities for software engineers.</p> <p>The SUPERSEDE project proposes a feedback-driven approach for software life cycle management, with the ultimate purpose of improving users' quality of experience. Decisions on software evolution and runtime adaptation will be made upon analysis of end-user feedback and large amount of data monitored from the context. An integrated platform will articulate the methods and tools produced in the project. The project will provide advancements in several research areas however, the major contribution will be in integrating methods and tools from the mentioned areas, thus providing a new solution framework for software evolution and adaptation for data-intensive applications.</p> <p>Three use cases have been identified to provide a solution, which is based on the needs of different companies. They are representative for different data-intensive application domains (i.e. energy consumption, sport event webcasting). This diversity also allows a validation of the methods and tools produced to ultimately provide evidence of potential for productivity gains.</p>

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	<p>CONSORTIUM: 8 partners with large scientific, dissemination and exploitation expertise on the topics of the project. Balanced consortium from different perspectives: geographical (5 countries) and profile (4 academic partners + 4 companies, 2 large and 2 SMEs).</p>
<p>VITAL</p>	<p>Epidemiological reports from around the world suggest that more people than ever before are living with (especially chronic) diseases. As a consequence, sustained efforts to reduce morbidity and mortality rates have been joined by systematised efforts to improve the lives – the quality of life – of those living with disease in ways that are measurable and auditable.</p> <p>VITAL will focus on the making of ‘quality of life’. While social studies of medicine have of late been marked by a ‘bio-turn’, it is apparent that within contemporary medicine, life is envisaged as much more than cellular and molecular activity; it is also a social activity and a personal experience. Not only is life sustained, it is also lived. In recent decades, morbid living – living with disease – has come to be the object of novel forms of knowledge, expertise, measurement and management while also generating new medical practices and attendant ways of relating to oneself.</p> <p>VITAL suggests a shift in attention from the ways in which the social sciences have previously studied morbid living and related issues of quality of life. Rather than continue longstanding efforts to understand how people cope with disease or to refine definitions and instruments for measuring the quality of life of the sick, in VITAL we will empirically study the co-production of ‘quality of life’ within healthcare through four ethnographically-grounded studies of how ‘quality of life’ is assembled, mobilised, negotiated and practiced in concrete medical settings. The four studies will focus on how knowledge about living with disease is assembled and mobilised, on the one hand, and how morbid living is negotiated and practiced on the other.</p> <p>The key outcomes of VITAL will be theoretical advancement of understandings of vitality in the 21st century beyond molecular biology and methodological innovation to facilitate empirical study of co-production processes that involve social science knowledge and practice.</p>
<p>WOMEN-UP</p>	<p>Urinary incontinence (UI), considered as a disease according to the World Health Organization (WHO), is not a life-threatening condition, but causes a very negative impact on daily living and quality of life. 56 million European citizens are affected by UI, which represents a serious impairment to the quality of their professional and personal life. Recent statistics show that 346 million people worldwide experienced any type of UI in 2008, which will increase to 420 million by 2018. In addition, when UI appears it is maintained throughout a lifetime if no solution is provided, causing huge social and economic costs (nearly \$10 billion is lost every year in direct treatment cost and lost productivity due to UI).</p> <p>The main objective of WOMEN-UP project is to improve the quality of life of urinary incontinence patients through a holistic and cost-effective ICT-solution, allowing for the self management of the chronic UI disease via a decision support system and a secure remote medical supervision.</p> <p>This general objective is divided into the following specific objectives:</p> <ul style="list-style-type: none"> • To improve women’s health by providing lifestyle changes through an integral and multifactorial treatment. • To develop an ICT-based system to facilitate a holistic solution for a conservative home treatment: Lifestyle interventions and pelvic floor muscle training with remote clinical assessment and supervision. • To make eHealth tools for UI more effective, user-friendly and widely accepted by involving professionals and patients in strategy, design and implementation. • To assess the cost-efficiency of the proposed ICT-based solution for significantly reducing health system costs by up to 72%

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	<ul style="list-style-type: none"> • To develop an innovative approach for the supervision of Pelvic Floor Muscles Training • To increase patient <p>The project WOMEN-UP will be developed by a consortium that brings together 9 partners from 6 different EU member states (Spain, Finland, Netherlands, Czech Republic, Romania, and Switzerland).</p>
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UNIRC

H2020 research projects of UNIRC with existing gender content	
Project	Abstract
GEECCO	<p>GEECCO aims to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs are located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies. It is thus a question of excellence, competitiveness and justice to achieve gender equity within STEM-institutions, including policy and decision making bodies. Concerning the gender dimension in research programmes RFOs are the key to substantial changes and thus a crucial part of the aspired transformation. GEECCO will pursue the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field: (i) Setting up change framework and a tailor-made GEP for each participating RPO; (ii) Implementing gender criteria in the activities of RFOs; (iii) Setting up a self-reflective learning environment in and between all RPOs und RFOs to participate from existing experiences and match them with their specific needs and circumstances. Facilitators will build up appropriate communication structures and processes within the RPOs and RFOs. They will enable the RPOs and RFOs to help themselves in the longer term dealing with internal resistances against gender equality. (iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project. GEECCO will develop the “GEECCO Experience: Dos and Don’ts while Degenderizing the STEM Field”, a guideline for RPOs and RFOs in the STEM field how to promote gender equality in the STEM field and intends to participate in standardization processes at EU level to measure “gender balance performance” of RPOs and RFOs.</p>

PK

H2020 research projects of PK with existing gender content	
Project	Abstract
GEECCO	<p>GEECCO aims to establish tailor-made Gender Equality Plans (GEPs) in 4 European RPOs and to implement the gender dimension in 2 RFOs (funding schemes, programmes and review processes). All participating RPOs are located in the STEM (Science, Technology, Engineering, and Mathematics) field, where gender equality is still a serious problem and whose innovations are increasingly important in the knowledge-based economies. It is thus a question of excellence, competitiveness and justice to achieve gender equity within STEM-institutions, including policy and decision making bodies. Concerning the gender dimension in research programmes RFOs are the key to substantial changes and thus a crucial part of the aspired transformation. GEECCO will pursue the following objectives in order to enhance systemic institutional change towards gender equality in the STEM-field: (i) Setting up change framework and a tailor-made GEP for each participating RPO; (ii) Implementing gender criteria in the activities of RFOs; (iii) Setting up a self-reflective learning environment in and between all RPOs und RFOs to participate from existing experiences and match them with their specific needs and circumstances. Facilitators will build up appropriate communication structures and processes within the RPOs and RFOs. They will enable the RPOs and RFOs to help themselves in the longer term dealing with internal resistances against gender equality.</p>

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	<p>(iv) Evaluate GEP implementation within the participating RPOs and RFOs with a quantitative evaluation using monitoring indicators and a qualitative monitoring to enhance and fine-tune implemented actions over the course of the project. GEECCO will develop the “GEECCO Experience: Dos and Don’ts while Degenderizing the STEM Field”, a guideline for RPOs and RFOs in the STEM field how to promote gender equality in the STEM field and intends to participate in standardization processes at EU level to measure “gender balance performance” of RPOs and RFOs.</p>
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