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234. Curriculum Erasmus Mundus master's degree programme Digital Communication Leadership (DCLead) at Paris Lodron University of Salzburg (PLUS)
(Version 2020)

In its session on 23 June 2020 the Paris Lodron University of Salzburg Senate formally approved the curriculum for the Erasmus Mundus master's degree programme Digital Communication Leadership (DCLead) finalised by the Communication Science curriculum committee at the University of Salzburg in its meeting on 14. January 2020 in the version that follows.

The legal basis for the curriculum is the 2002 Federal Act on the Organisation of Universities and their Studies (Universities Act 2002 – UG), Federal Law Gazette No. 120/2002, and the section of the Statutes of the University of Salzburg pertaining to university studies.

§1. General

1. The present version of the curriculum builds on the curriculum for the European joint master's programme (EMJMD) Digital Communication Leadership (DCLead) finalised by the Communication Science curriculum committee at the University of Salzburg in its 24 November 2015 meeting, later approved by the Paris Lodron University of Salzburg Senate and published in the Bulletin (Mitteilungsblatt) of 17 March 2016.

2. The duration of the Erasmus Mundus master's degree programme Digital Communication Leadership (DCLead) is minimum four semesters and requires the completion of at least 120 ECTS credits.

3. For completing the study track **Digital Communication, Policy, and Innovation in Europe**, or "**POLINN**", graduates of the programme Digital Communication Leadership (DCLead) are awarded the academic degree of "Master of Arts", abbreviated "MA", jointly by PLUS (Paris Lodron Universität Salzburg) and VUB (Vrije Universiteit Brussel, Belgium).

4. For completing the study track **Digital Technology & Management**, or "**TECMAN**", graduates of the programme Digital Communication Leadership (DCLead) are awarded the academic degree of "Master of Science", abbreviated "MSc", jointly by PLUS and AAU (Aalborg Universitet, Denmark).

5. For completing the study track **Information and Communication Technology for Development**, or "**ICT4D**", graduates of the programme Digital Communication Leadership (DCLead) are awarded the academic degree of "Master of Science", abbreviated "MSc", and MSc International Development Studies awarded by WU (Wageningen University)

6. Admission to the DCLead programme is dependent on the prior completion of a Bachelor's degree or equivalent programme at a recognised domestic or international tertiary educational institution (cf. UG 2002 § 64 Abs. 5) and the admission by the DCLead consortium (PLUS, AAU, VUB, WU). Further general admission rules are established in Annex II to this curriculum.

7. ECTS credits are attributed to all study achievements that have to be fulfilled by the students. One ECTS credit is equivalent to 25 working hours and refers to the average workload required to reach the relevant learning outcomes. The workload of an academic year is equivalent to a minimum of 1500 hours, 60 ECTS credits.

8. Students with disabilities and/or chronic disease may not experience any disadvantages during their studies. The principles of the UN Convention on the Rights of People with Disabilities, The Austrian Equality Act, as well as the principle of compensation measure shall apply.

9. This programme is taught entirely in English.

§2. Programme Description and Qualification Profile

§2.1. Programme description

DCLead is carried out as an Erasmus Mundus master's degree programme coordinated by the University of Salzburg, Department of Communication Studies together with the Aalborg University of Copenhagen (AAU), Denmark, the Vrije Universiteit Brussel (VUB), Belgium, and Wageningen University (WU), in the Netherlands. It approaches the vast and recent field of digital communication

from an interdisciplinary and international point of view bringing together advanced academic discussion with practical knowledge and skills. The programme promotes a non-techno-deterministic, social, ethical and critical reflection on digital communication for future leaders of the field.

§2.2. Qualification profile and competences (learning outcomes)

The leadership-approach of this curriculum encompasses economic-managerial, technological and media and communication knowledge with social responsibility and ethical-cultural dimensions of digital communication. The ability to combine these dimensions, to think together economy and social aspects, technology and culture, individual needs and society is considered an indispensable precondition for future leaders in the field. The aim of the programme is to deepen and broaden this knowledge and to provide an arena for innovative ideas and discussions as well as a profound preparatory basis for future fields of employment in the area of digital communication. Students will be expected to gain knowledge, competences and skills, according to their chosen study track, in several of the following fields: (new) media policies, business and economics of (new) media, media management, service design, network and service development, innovation studies, political economy, and information and communication technologies for human, social and rural development. Also, the programme distinguishes between European and other perspectives on those fields. Correspondingly, the learning outcomes of the DCLead Programme attach importance to the following areas:

§2.2.1. Applied Academic Knowledge

Students are able to apply their academic knowledge by providing critical contextualization and evaluation of current national and international developments and discussions and independently deepening insights and expanding the theoretical basis of their field of study. Students can translate their understandings and findings into conclusions, scenarios, advice, policy recommendations and strategies in a competent way. They can finally apply the acquired knowledge and skills in a professional context.

§2.2.2. Specialization Knowledge & Study Tracks

Students gather advanced knowledge in their specialization field according to their chosen study track in the following manner:

- Digital Communication, Policy and Innovation in Europe [POLINN]: Students are able to understand and analyse the relationship between policy makers, market mechanisms and the users considering the cultural dimension of the field of digital communication. This includes the delivery of profound policy analysis, advice and recommendations for future policy developments, critical market analysis and a socially grounded contextualization of current developments and debates on digital communication in a globalized world.
- Digital Technology and Management [TECMAN]: Students are able to understand and analyse the relationships between technology developments and business potentials in the field of digital communication. This includes the promotion of developments of new business models, the evaluation of technology trends and the use, adoption and domestication of ICT and new media.
- Information and Communication Technologies for Development [ICT4D]: Students are able to understand and analyse the possibilities and risks connected with the use of digital communication for the enhancement of human, social and economic conditions particularly of people living in developing countries.

§2.2.3. Solution-oriented Skills

Students demonstrate entrepreneurial spirit, responsibility, communicative attitude, creativity and the ability to plan, coordinate, supervise and advise. The acquired skills enable the graduates to become independent, responsible, inquiring and reflective professionals.

§2.2.4. Social competence

Students show and open and constructive attitude, have respect for other views and beliefs and remain open-minded concerning alternative points of view. In a culturally diverse international context they act upon an open attitude and critically reflect on their own position. They are open to scientific doubt and societal pluralism.

§2.3. Demand and relevance for science, society and industry

The master's programme addresses topics relevant for academic, societal and industry discussions. Policy makers, stakeholders in media and communication activities or organizations dedicated to social and economic developments are nowadays not only confronted with new challenges (being linked among other phenomena and developments to technological convergence, emerging new information flows, new gatekeepers, changing ways of distribution, user patterns and preferences as well as adapting institutional frameworks) but also need to understand and re-tune their responsibilities, to comprehend the differences between cultures and the values supporting the actions of partners and users, in order to produce and deliver the benefits that these latter groups require. Those who wish to play a role in this environment, to push its innovation boundaries, to show initiative in action that generates consensus and participation, need to possess a broad and interdisciplinary set of knowledge and skills, which will be provided by this master's programme. As a result, to be successful, leaders in digital communication require a profound understanding of the following areas addressed within the six core competencies of this study programme:

- Digital technologies and their developments
- Policy and innovation
- Business and management
- Digital communication and culture(s) in Europe
- Human, social and economic development
- Ethics and social responsibility

This study programme makes available modules and an international network of academic expertise that together provide the basis for the empowerment of future leaders in the vast area of digital communication. For graduates of the programme future fields of employment may for example provide qualified jobs:

- in existing ICT and media companies e.g. as service developers or managers and business developers,
- as entrepreneurs in new media and web companies,
- in IT support functions in business companies and public institutions,
- in media companies working at the European or international level whose work is influenced by European decision-making e.g. in the following positions:
  - as strategic managers in positions related to innovation and R&D
  - as strategic analysts of European communication markets
  - as policy analyst
  - as strategic analyst of user studies
- as scientists or researchers in the area of new media and society and/or social and economic development,
- as public servants and administrators within Ministries and regulatory authorities in the policy field of media and communication,
- as consultants regarding various aspects of new media and digital innovation,
- as lobbyists in lobby organisations trying to influence Europe's innovation and communication policies,
- in European institutions working in the field of new media and society or economic and social development, collaborating in policy preparation for EU institutions (e.g. European Council, European Parliament, European Commission,…),
- as journalists focusing on new media and digital innovation who can provide nuanced analyses of current developments in the European public sphere(s),

- as development programme/project coordinators, for independent and non-profit organizations, or governmental agencies.

§3. Study Tracks and Mobility Periods

1. The students of the programme DCLead are selected for participation in one of the tracks of the programme, depending on their choice, their qualifications and the positive assessment of the selection committee.
2. All students spend the first semester and the Autumn School periods at PLUS.
3. Students selected for the track POLINN spend the second and third semester at VUB.
4. Students selected for the track TECMAN spend the second and third semester at AAU.
5. Students selected for the track ICT4D spend the second and third semester at WU.
6. The fourth semester is the semester of the individual mobility periods.
7. Individual mobility periods can be spent at any of the four consortium partners (PLUS, VUB, AAU or WU).
8. During this period and for the completion of the Master's Thesis, students can collaborate with, and be hosted by one of the Consortium's associated higher education institutions (for a research stay), or by one of the Consortium's industry partners (for an internship).
9. Procedures for admission to research stays and internships are described on the programme's online repository available to all registered users from http://intranet.dclead.eu

§4. Programme Structure and Progression

The programme DCLead comprises 5 modules with compulsory subjects for in total 78 ECTS credits. In addition, a minimum of 12 ECTS credits must be obtained from elective subjects. The Master's Thesis (including guidance, dissemination and defence) is awarded with 30 ECTS credits in the case of POLINN and TECMAN, and 31 ECTS credits in the case of ICT4D, as different requirements apply. Requirements for the thesis are published in the programme's intranet pages.

Partners delivering	Modules		Tracks & Workload (ECTS)		
	No.	Title	POLINN	TECMAN	ICT4D
PLUS	1	DCLead Core Competencies	13	13	13
PLUS	2	Theoretical and Methodological Skills	15	15	15
VUB	3_P	Digital Communication, Policy and Innovation in Europe I	23		
AAU	3_T	Digital Technology & Management I		25	
WU	3_I	Information and Communication Technologies for Development I			24
VUB	4_P	Digital Communication, Policy and Innovation in Europe II	24		
AAU	4_T	Digital Technology & Management II		25	
WU	4_I	Information and Communication Technologies for Development II			23
PLUS	5	Elective Subjects I	2	2	2

AAU	6	Elective Subjects II	13	10	12
VUB					
WU					
All	7	Master's Thesis	30	30	31
		Total	120	120	120

§5. Types of Courses

For this curriculum the consortium partners offer the following types of courses:

Lectures (VO) present thematically coherent topics on the subject, identify various correlations between ideas within the subject, and demonstrate in exemplary form problems and solutions. Different theories and the current state of the field are addressed. Lectures are normally taught weekly.

Exercise combined with lecture (UV) combines parts of exercises with lectures in a course tailored according to specific didactic considerations. UVs allow for the connection of applied knowledge with theoretical concepts whereby the focus is more on the practical solution. Courses can be taught on a weekly basis or as blocked courses, attendance is mandatory.

Lecture combined with exercise (VU) combines a theoretical introduction into a special field with the transfer of applied competencies. The focus of VUs is on the conceptual/theoretical framing and its application for research. Courses can be taught on a weekly basis or as blocked courses, attendance is not mandatory.

Seminars (SE) provide a forum for serious academic discussion and examination of debates pertinent to the field. They rely on project-based learning, promote scientific work and discussion and require students to develop their own scientific contributions in the form of a semester project. The writing and presentation of a seminar paper is a compulsory component.

Colloquium (KO) focuses on scientific discourses, on how to argue and how to collaborate with other scientific scholars. Furthermore, KO enables the debate on thesis and other scientific writings. It is weekly based or a blocked course, attendance is mandatory.

Interdisciplinary projects (IP) combine scientific and applied thinking to work on projects, including approaches, methods, and theories from various scientific disciplines. IP are weekly based or blocked courses, attendance is mandatory.

§6. Content and Semester Structure

The following tables contain a list of all the modules and courses of the DCLead programme. The assignment to the semesters remains a recommendation and ensures that the sequence of courses is optimally based on previous knowledge. Still, modules and courses can be completed in a different order unless requirements are fixed in § 10. A detailed description of the modules including content, methods and skills can be found in Annex I.

§6.1. POLINN: Digital Communication, Policy and Innovation in Europe

Modules & Courses	Sem. Hours	Type	ECTS	Semester			
				I	II	III	IV
(1) COMPULSORY BASIC MODULES	**13**		**28**	**28**			
Module 1: Core Competencies	**6**		**13**	**13**			
DCLead Autumn School I	2	IP	3	3			
Paradigm Shifts in Leadership and Competencies	2	VU	4	4			
Critical Analysis of Digital Communication Literature	2	SE	6	6			
Module 2: Theoretical and Methodological Skills	**7**		**15**	**15**			
Digital Communication Theories	2	VO	3	3			
Social Science Research Methods	3	VU	6	6			
Research Project	2	SE	6	6			
(2) COMPULSORY SPECIALIZATION MODULES	**17**		**47**		**23**	**24**	
Module 3_P: Digital Communication, Policy and Innovation in Europe I	**8**		**23**		**23**		
User and Innovation in Digital Media	2	VU	6		6		
European Media Markets	2	VU	6		6		
Specialised Lecture on Culture and Public Sphere	2	VU	6		6		
Students choose one of the following courses — Open Science: Policy and Practices							
Media, Culture & Globalisation Theories							
European Public Sphere							
Journalism Practice in Europe							
DCLead Autumn School II	2	IP	5		5		
Module 4_P: Digital Communication, Policy and Innovation in Europe II	**9**		**24**			**24**	
Critical Issues in Media Economics	3	VO	6			6	
Digital Methods and Innovation	2	SE	6			6	
Specialised Lecture on Policy	2	VU	6			6	
Students choose one of the following courses — European Media and Communication Policies							
Internet Censorship, Control and Governance							
Specialiased Lecture on Digital Communication	2	VU	6			6	
Students choose one of the following courses — Data, Privacy and Society							
Media Literacy and Digital Inclusion							

			ECTS	I	II	III	IV
(3) ELECTIVE SUBJECTS			**15**	**2**	**7**	**6**	
Module 5: Elective Subjects I			2	2			
Module 6: Elective Subjects II			13		7	6	
(4) MASTER'S THESIS			**30**				**30**
Master's Thesis			27				27
Master's Thesis Defence			3				3
Total			**120**	**30**	**30**	**30**	**30**

§6.2. TECMAN: Digital Technology & Management

Modules & Courses	Sem. Hrs	Type	ECTS	Semester			
				I	II	III	IV
(1) COMPULSORY BASIC MODULES	**13**		**28**	**28**			
Module 1: Core Competencies	**6**		**13**	**13**			
DCLead Autumn School I	2	IP	3	3			
Paradigm Shifts in Leadership and Competencies	2	VU	4	4			
Critical Analysis of Digital Communication Literature	2	SE	6	6			
Module 2: Theoretical and Methodological Skills	**7**		**15**	**15**			
Digital Communication Theories	2	VO	3	3			
Social Science Research Methods	3	VU	6	6			
Research Project	2	SE	6	6			
(2) COMPULSORY SPECIALIZATION MODULES	**18**		**50**		**25**	**25**	
Module 3_T: Digital Technology & Management I	**13**		**25**		**10**	**15**	
Internet Services and Governance	2.5	VU	5		5		
User Experience and Computer Ethics	2.5	VU	5		5		
Managerial Economics and Entrepreneurship	2.5	VU	5			5	
Innovation and Business Models	2.5	VU	5			5	
DCLead Autumn School II	3	IP	5			5	
Module 4_T: Digital Technology & Management II	**5**		**25**		**15**	**10**	
Semester Project (Governance and Strategies)	3	SE	15		15		
Semester Project (Design and Markets)	2	SE	10			10	
(3) ELECTIVE SUBJECTS			**12**	**2**	**5**	**5**	
Module 5: Elective Subjects I			2	2			
Module 6: Elective Subjects II			10		5	5	
(4) MASTER'S THESIS			**30**				**30**
Master's Thesis			27				27
Master's Thesis Defence			3				3
Total			**120**	**30**	**30**	**30**	**30**

§6.3. ICT4D: Information & Communication Technologies for Development

Modules & Courses	Sem. Hrs	Type	ECTS	Semester			
				I	II	III	IV
(1) COMPULSORY BASIC MODULES	**13**		**28**	**28**			
Module 1: Core Competencies	**6**		**13**	**13**			
DCLead Autumn School I	2	IP	3	3			
Paradigm Shifts in Leadership and Competencies	2	VU	4	4			
Critical Analysis of Digital Communication Literature	2	SE	6	6			
Module 2: Theoretical and Methodological Skills	**7**		**15**	**15**			
Digital Communication Theories	2	VO	3	3			
Social Science Research Methods	3	VU	6	6			
Research Project	2	SE	6	6			
(2) COMPULSORY SPECIALIZATION MODULES	**15**		**47**		**24**	**23**	
Module 3_I: Information and Communication Technologies for Development I	**8**		**24**		**24**		
Critical Reflection on Research in International Development Practice	2	SE	6		6		
Change, Interhuman Processes and Communication	2	SE	6		6		
Academic Consultancy Training (ICT4D related projects)	2	IP	9		9		
Modular Skills Training	2	VO	3		3		
Module 4_I: Information and Communication Technologies for Development II	**9**		**23**			**23**	
Perspectives and Themes in International Development Studies	2	SE	6			6	
Politics of Knowledge and Inclusive Innovation	2	SE	6			6	
Researching Socio-Technical Practices, Innovation and Responsible Futures	2	SE	6			6	
DCLead Autumn School II	3	IP	5			5	
(3) ELECTIVE SUBJECTS			**14**	**2**	**6**	**6**	
Module 5: Elective Subjects I			2	2			
Module 6: Elective Subjects II			12		6	6	
(4) MASTER'S THESIS			**31**			**1**	**30**
Master's Thesis			27				27
Master's Thesis Defence			3				3
Thesis Dissemination Strategy			1			1	
Total			120	30	30	30	30

§7. Elective Subjects

1. Students of the track POLINN must choose elective subjects totaling 15 ECTS credits.
2. Students of the track TECMAN must choose elective subjects totaling 12 ECTS credits.
3. Students of the track ICT4D must choose elective subjects totalling 14 ECTS credits.
4. Elective subjects are chosen among the courses available at the host university for the semester concerned. Exceptions can only be authorised by the Programme Board.
5. These elective courses are designed to further the acquisition of additional professional skills and strengthen individual areas of focus within a student's course of study.
6. The partner universities can provide recommendations for elective subjects contributing to the acquisition of advanced knowledge within the field of study, soft skills or gender and diversity issues.
7. Advice concerning elective subjects is provided by local members of the Programme Board.

§8. Master's Thesis

1. The Master's Thesis serves to prove that the student is qualified to work independently on a scientific subject within the field of one of the three tracks of the DCLead Programme demonstrating the ability to work according to current scientific standards with regard to content and methodology.
2. Completion within six months must be possible and reasonable to the student (cf. UG 2002 § 81 Abs. 2).
3. The topic of the Master's Thesis must correspond with the chosen study track of the student.
4. During the writing of the Master's Thesis and the supervision of the students the provisions of the Copyright Acts, BGBl. Nr. 111/1936, must be observed (cf. UG 2002 § 80 Abs. 2).
5. The Master's Thesis consists of 20.000 to 25.000 words (approx. 60-70 pages) and must be written in English.
6. The Master's Thesis is supervised by two faculty members: one from PLUS, and one from AAU, VUB or WU depending on the track selected by the student. These faculty members supervising the thesis must be qualified according to the regulations of their own institution.
7. If agreed by the Programme Board, the Master's Thesis can be also produced with the support of one or more experts from an associated partner institution of the consortium.
8. The procedure for the submission of the Master's Thesis is available to the students from the programme's online repository available to all registered users from http://intranet.dclead.eu

§9. Examination Admission Requirements

1. For the admission to exams of all individual courses, the admission regulations of the institution hosting the exam are applied.
2. All necessary requirements for the admission to exams are provided to the students at the beginning of the course.

§10. Examination Regulations

1. All courses are individually assessed via course examination.
2. For all the individual course examinations, the examination regulations of the institution hosting the exam are applied.
3. All institutions hosting exams will apply the agreed programme's grading scale, expressed in percentages, and the corresponding grade in their national general grading system for course examination.
4. The common grading system based on the ECTS credits grading table is made available to the students at the beginning of their studies.

§11. Master's Examination before an Examination Committee

1. The programme DCLead will be completed with a Master's Examination administered by PLUS.
2. Prerequisite for admission to the Master's Examination is the completion of all courses and the submission of the Master's Thesis.
3. The Master's Examination consists of one examination subject (Thesis Defence).

§12. Entry into Force

1. The Curriculum enters into force on 1 October 2020 and applies to the students registered in the academic year 2020/2021 and onwards.
2. Students who are registered for the EMJMD Digital Communication Leadership (DCLead) at the University of Salzburg at Paris Lodron University Salzburg (Version 2016, Bulletin No 104 of 17 March 2016) at the time of entry into force of this curriculum shall be entitled to complete their studies in accordance with these study regulations by 28 February 2023 at the latest.
3. Students who are registered for the EMJMD Digital Communication Leadership (DCLead) at the University of Salzburg at Paris Lodron University Salzburg (Version 2016, Bulletin No 104 of 17 March 2016) at the time of entry into force of this curriculum shall be entitled to voluntarily transfer to this curriculum specified in this document at any time within the admission deadlines. A written, binding declaration specifying their intention to transfer to the new curriculum shall be addressed to the Admissions Office.

§13. Annex I: Module Description

§13.1. Module 1: DCLead Core Competences

Workload	13 ECTS credits
Learning Outcomes	Following the successful participation in this module, students are going to be able to: gather profound basic understanding of the objectives of the programme studied; gather profound basic knowledge of the six core competencies of the programme (Ethics and social responsibility, culture, digital technologies, policy and social innovation, business and management) and of the concept of leadership; and producing an academic text up to the standards required by the programme.
Module Content	This module introduces the DCLead Master Programme. Within the one-week kick-off Autumn School, students get an insight in the universities involved in this programme and their specialization fields. Members of all core partner universities will be present in this Autumn School and discuss relevant issues and development within the field. A joint lecture with invited lecturers (from partner universities, associated partners, and beyond) at the Autumn School introduces the concepts of the programme tracks and provide perspectives for research. Additionally, the students produce an academic paper according to a selected topic from the joint lecture combined with a scientific interview with one of the invited lecturers. The 2 basic introductory courses (VU+SE) provide, on the one hand, insights into the state-of-the-art and into the core literature regarding the five core competencies, and on the other hand, knowledge and skills required for successful leadership in multicultural environments. By attending Critical Analysis of Digital Communication Literature students will learn from recent core literature concerning all six objectives of the programme: (1) Digital technologies and their developments; (2) Policy and innovation; (3) Business and management; (4) Digital communication and culture(s) in Europe; (5) Human, social and economic development, and (6) Ethics and social responsibility. This seminar will also train the students to writing academic texts to the standards required in the programme. By attending Paradigm Shifts in Leadership and Competencies, students will learn about different leadership styles based on the approaches taken by current global leaders, and will be able to draw on their experiences as well as on the experiences of their classmates to see the variety of ways in which businesses operate around the world.
Courses	IP Autumn School I (3 ECTS) KO Paradigm Shifts in Leadership and Competencies (4 ECTS) SE Critical Analysis of Digital Communication Literature (6 ECTS)
Type of examination	Course Examination: written or oral examination, written paper or essay

§13.2. Module 2: Theoretical and Methodological Skills

Workload	15 ECTS credits
Learning Outcomes	Following the successful participation in this module, students are going to be able to: • distinguish between different theoretical approaches relevant for the field of digital communication leadership • apply critical thinking to issues of digital communication • understand the fundamental principles of social science research • identify the usefulness of specific empirical methods for specific research topics/questions • apply the knowledge they gathered on theories and methodological instruments within a self-chosen research project

	• develop, guided by the course instructors, a consistent research design within their field of studies • set up a research proposal including literature review, research questions and hypothesis as well as methodological ideas for investigation • execute their research project and write a final report on their findings
Module Content	**VO: Digital Communication Theories (3 ECTS)** Since its public initiation in the early 1990s scholars from different disciplines have theorized upon the internet and the upcoming age of information. Different label such as information society, network society or knowledge society have been discussed widely and controversially among scholars and practitioners alike. This course validates these debates and introduces contemporary approaches. Guest lecturers will discuss internet and information theories from different perspectives such as culture, computer sciences and democracy. Furthermore, leadership concepts are introduced in this course. **VU: Social Science Research Methods (6 ECTS)** Students learn to design methodologically advanced data collection tools (surveys, interviews, contextual metadata) using appropriate existing resources (e.g.: ZIS/Understanding Society/ISSP-Database), as well as designing their own if necessary. Furthermore, they will gain an understanding regarding how they can apply social scientific methods within the context and constraints of a modern digital society. Thus they will be able to critically reflect on data presented by other researchers or business partners in different settings. To do so the course will start with a short recapitulation of current methodological paradigms found in the social sciences. Afterwards the students will be confronted with the implications of modern digital communication technology and its societal impact (internationalisation, globalisation, big data) regarding methodology. To do so, empirical research in the political, economic and academic context will be discussed. **SE: Research Project (6 ECTS)** The Research Project Seminar aims for the development of a research proposal related to problems/themes/issues/questions in the field of Digital Communication. The proposals will be according to the study track of the students either in the field of Digital Communication policies, cultures, innovation and social responsibility/ethics or related to management and business issues in digital communication technologies. Ideally, the Project Seminar is harvesting from the learning outcomes of the other DCLead courses and combines knowledge of relevant literature and theories with methodological research skills. The students will produce an elaborated proposal for investigating and doing social scientific research (both qualitative or quantitative) on themes, which are qualified (social, political, technological, cultural relevance) within the DCLead programme.
Courses	VO: Digital Communication Theories (3 ECTS) VU: Social Science Research Methods (6 ECTS) SE: Research Project (6 ECTS)
Type of examination	Course Examination: Multiple choice test; research proposal, seminar paper (research report) & presentation of research findings

§13.3. Compulsory Specialization Module 3_P: Digital Communication, Policy and Innovation in Europe I

Workload	23 ECTS credits
Learning Outcomes	The courses of these modules contributes to the following *general learning results* of the master in communication studies. Hence, following the participation in this course, students will improve their knowledge of, or learn to: show in-depth knowledge, understanding and insight within the field of communication sciences and in relation to the latest evolutions and discussions at both the national and international level regarding *media, internet and globalization*; show an open and constructive attitude whilst having respect for other views and beliefs; act upon an open attitude in a culturally diverse international context. They critically reflect on their own (geographical, social, cultural, local, personal, …) position; to discuss and debate current societal and scientific topics and theoretical developments related to *media, internet and globalisation*; to discuss issues on the basis of critical and substantiated reflections and research findings, open-mindedly and willing to acknowledge other arguments; to translate acquired understandings and findings into concrete conclusions, scenarios, advice, policy recommendations and strategies, and are able to communicate and implement these in a professional manner; independently elaborate, organise, plan and conduct their own original research, interpret its results and groundedly, coherently and convincingly communicate it orally and in writing; and to communicate their point of view in a clear and scientific-grounded argumentation to various target groups. Specific learning outcomes for each course include: **VU Users and Innovation in Digital Media** Students are able to better understand and critically assess the role of digital media users in innovation processes. At the same time they are able to situate this within a broader knowledge on the interplay between social-economic changes and transformations in media and ICT. **VU European Media Markets** Students will be able to: know which characteristics different media services have (e.g., television production, radio broadcasting, social media, film) and can explain these characteristics and illustrate with examples; what the structure is of different media markets (for product, Member State, big vs. small Member State level) and can explain this with examples; which trends influence revenue models in European media markets and can explain this with examples; to apply the course materials (e.g., characteristics of television production) to recent case studies (e.g., how can we explain that Endemol sells lots of formats, but is not profitable?); understand the relations between different parts of the course, among others through identifying the differences and similarities between different media product and geographical markets; and to engage in the research of a topical issue, relate this to course materials, and write a succinct non-scientific essay on it. **VU Open Science: Policy and Practices (Part of "Specialised Lecture on Culture and Public Sphere")** Students come into contact and discuss in-depth the burgeoning field of Open science gain insight into key trends and policies, and are able to critically discuss and assess the implications for stakeholders. **VU Media, Culture and Globalisation Theories (Part of "Specialised Lecture on Culture and Public Sphere")** Specific learning outcomes of this course include: to provide students with an overview of theoretical perspectives and an understanding of how globalization processes affect media and culture and vice versa; to get acquainted with a variety of relevant concepts, theoretical schools and authors for the purpose of identifying and applying key concepts and theories that explain the relationship between media, culture and globalization; to take into account both pioneering work in the field and

	contemporary research and analysis; to stimulate critical reflection and have interactivity and discussion among staff and students; to offer a multi- and interdisciplinary approach to the course's topic; and to connect theory to practice by making use of examples that illustrate the concrete and research relevance of media, culture and globalization theories. **VU European Public Sphere (Part of "Specialised Lecture on Culture and Public Sphere")** After taking this course students will be able to understand and discuss: the EU Decision Making Process and the main DMP procedures; the main theories of EU integration and the multilevel governance approach specific to the EU construction; the EU Information and Communication policy and the role and responsibilities of the main EU institutions; the EU public sphere(s) and its state of the art and challenges ahead; the role and interplay of EU governance and EU citizenship and identity building in the making of a critical EU Public Sphere; the challenges and shortcomings of the EPS and EU Information and Communication policy in the context of a multilevel governance supranational structure; and the EU participatory model. **VU Journalism Practice in Europe (Part of "Specialised Lecture on Culture and Public Sphere")** From their participation in this course, the students will be able to: gain knowledge and understanding the dynamics of their future professional context; apply these insights to identify opportunities for journalism innovation; assess the impact of their professional actions from a socio-economical, deontological and entrepreneurial perspective.
Module Content	**VU Users and Innovation in Digital Media** People as users of digital media and communication technologies have since long been acknowledged as central stakeholders in the European information society. We therefore focus on the interplay between changes and design of digital media and technologies on the one hand and transitions in the way consumers and citizens in Europe adopt and use digital media in their everyday life on the other hand. This generates a deeper understanding of the why, what and how of interdisciplinary user research in the digital media field. First, the course discusses the relevance of user research in the field of digital media. This is framed within a broader understanding of theoretical traditions of user studies from an interdisciplinary perspective. We then sketch how users configure digital media as well as how digital media also configure user practices. Next we map out the ways that user types are differentiated in the scientific literature and business practice. Finally we link this up with the different ways that user innovativeness is captured. All this is illustrated by a number of concrete case studies in digital media industry and practice. **VU European Media Markets** This course provides an overview of European media markets. It provides an insight into the characteristics of media and communication goods and services; main revenue streams and main players; and new media trends. Topical issues/cases related to European media and communication markets, diverging interests of different players and strength/weaknesses/opportunities and threats receive special attention. The course relies in part on preparatory work of students, in particular on topical cases assigned to each student. Students can also choose among the following courses: **VU Open Science: Policy and Practices (Part of "Specialised Lecture on Culture and Public Sphere")** Open science and the knowledge based society; key trends and policies: what is changing and why,implications for stakeholders (including scientists).

VU Media, Culture and Globalisation Theories (Part of "Specialised Lecture on Culture and Public Sphere")
Historical contextualization and critical discussion; Pioneering and groundbreaking work in theorizing media, culture and globalization (e.g., Ang's Watching Dallas; Appadurai's scapes, …); Research traditions in media studies on media, culture and globalization (Political economy of communications; Cultural studies; Flow studies; Cultural Globalization, …); fundamental concepts that will be contextualized, elaborated and evaluated on their strengths and weaknesses (e.g. globalization, glocalization, internationalization, multilevel governance, cultural imperialism, one-way and contra flows, cultural differentialism & convergence, hybridization & creolization, cultural diversity, etc.); Interdisciplinary approaches to media, culture and globalization, ranging from political sciences and International Relations over economics and law to anthropological approaches; Contemporary approaches in the field and relationship with research in terms of new media and society in Europe in economics and markets, regarding policy, and on users.

VU European Public Sphere (Part of "Specialised Lecture on Culture and Public Sphere")
The course focuses on the European Public Sphere (EPS) and the EU Information and Communication policy and analyses their evolution, development and setbacks in the context of the EU multilevel governance structure. The course will cover, amongst other, the following topics: the EU decision making process; the main theories of EU integration; the main theories of the Public Sphere and the European Public Sphere; the EU Information and Communication policy and the role and responsibilities of the main EU institutions; the EU public sphere(s) and its state of the art and challenges ahead; the role and interplay of EU governance and EU citizenship and identity building in the making of a critical EU Public Sphere; the EU as a participative and deliberative polity; specific topics, themes and case-studies related to the topics above might be included according to the EU Institutional agenda and the development of the EU integration process.

VU Journalism Practice in Europe (Part of "Specialised Lecture on Culture and Public Sphere")
The course will address evolutions and innovations in the practice of journalism, and the challenges journalists and media workers face in the light of the global digital disruption in the sector. It consists of four main parts, addressing different aspects of the professional context: contextual factors shaping journalists daily work practice: academic approaches to the study of journalistic practice like Reese's hierarchy of influence and Bourdieu's field theory; innovation and entrepreneurial culture within journalism: innovation processes, open innovation, Living Labs, disruption of business models, etc.; new aspects within journalistic practice: digital storytelling, development, data journalism, collaboration, monetization, creativity, etc.; idea generation and project development: how to define the state of the art relating to your project, your innovation goals and the leap of knowledge, etc.

IP Autumn School II
At the Autumn School, the second year students have a chance to learn from the various activities organised by coordinating institution and carried out by various academics and experts of the partner institutions. Also, the students present concepts for their thesis in public sessions and in front of a panel of lecturers from partner universities. Normally, the preparatory work for the proposal takes place during the summer and the proposal is submitted a few weeks before the Autumn School. After the presentation, the students have a few weeks to update their proposal and report on the feedback received.

Courses	VU Users and Innovation in Digital Media (6 ECTS) VU European Media Markets (6 ECTS)

	VU Specialised Lecture on Culture and Public Sphere (6 ECTS) IP Autumn School II (incl. thesis outline) (5 ECTS)
Type of examination	Course Examination: written or oral examination

§13.4. Compulsory Specialization Module 3_T: Digital Technology & Management I

Workload	25 ECTS credits
Learning Outcomes	Students will be able to analyse the economic and technological conditions which influence governance and market structure of electronic communication infrastructures; apply economic theory for analysis of market conditions for provision of Internet services; analyse the role of data protection and privacy in provision of public and private internet services; analyse the digital transformation of the public sector and policy issues involved in this process; apply a costing and pricing strategy for products and services; apply a basic financial analysis and investment and risk analysis; evaluate the benefits and disadvantages of a change management process; evaluate the pros and cons of insourcing and outsourcing; apply theories and methodological tools on specific company and technology cases; and evaluate the application of business models in different business areas. Also the students will be competent in discussing and evaluate Internet policies at the national and international level; demonstrating development of his/her knowledge, understanding, and ability to make use of socio-economic methods within the fields of Internet services and governance; applying the concepts of usability and user experience both to screen-based and non-screen-based interactive systems; mastering different design methods and techniques for creating and testing interactive systems, including non-screen-based systems; identifying possible computer ethical issues related to the ICT system and / or its use context; discussing user cognitive models and other descriptions of users; reflect critically on methodological challenges in data from and about users as a source for design; evaluating interactive systems using techniques from interaction design and Human Computer Interaction; reflecting on the implications of using different methods and techniques for interaction design, including user involvement, and for evaluating systems; analysing the social context in which the use of ICT takes place; discussing concepts of privacy, user sovereignty and personalisation in relation to design dilemmas in the design of interactive systems; discussing the links between different design elements of business models: customer value, organisation, technology and financial issues; explaining the key linkages between the different theories of the course, and use these critically in an analysis of market trends and business models; combining knowledge on technological solutions with business development and business potential; and suggesting appropriate and innovative business models for companies, which are offering communication, media and information services and products and using these solutions in their business operations.
Module Content	From the courses Internet Services and Governance, User Experience and Computer Ethics, Managerial Economics and Entrepreneurship and Innovation and Business Models, the students will gain knowledge of: e-government services and citizen access; the techno-economics of Internet infrastructures, convergence and its impact on regulation and governance; regulation of competition, user access, and scarce resources; Internet organisations and the standardization process for internet technologies; network neutrality, unbundling and vertical separation of Internet infrastructures; consumer rights issues in relation to the provision of Internet services; different input and output modes for interactive systems, also in a historical perspective; different methods for designing interaction of ICT systems; different strategies for planning the interaction design of ICT systems; theories of entrepreneurship; technology management; product, process and market innovation; servitization of manufacturing industries and industrialization of service industries; internationalization strategies; business eco-systems; financial analysis including ac-

	counting; theories regarding business development based on communication, media and information technologies, including network economics, information economics, transaction costs analysis, and business ecosystems. They also should be able to demonstrate insight into governance structures of the Internet, understand the concepts of human computer interaction, interaction design and user experience and the relation between them; understand the concept and applicability of computer ethics and have an understanding of theories on innovation.
	The DCLead Autumn School II is a course offer to DCLead students that are starting their 3rd semester. At the Autumn School, the second year students have a chance to learn from the various activities organised by coordinating institution and carried out by various academics and experts of the partner institutions. Also, the students of the second year present concepts for their thesis in public sessions and in front of a panel of lecturers from partner universities. Normally, the preparatory work for the proposal takes place during the summer and the proposal is submitted a few weeks before the Autumn School. After the presentation, the students have a few weeks to update their proposal and prepare a report describing and commenting on the feedback received.
Courses	VU Internet Services and Governance (5 ECTS) VU User Experience and Computer Ethics (5 ECTS) VU Managerial Economics and Entrepreneurship (5ECTS) VU Innovation and Business Models (5 ECTS) IP Autumn School II (incl. thesis outline) (5 ECTS)
Type of examination	Course Examination: individual written or oral exam

§13.5. Compulsory Specialization Module 3_I: Information & Communication Technologies for Development I

Workload	24 ECTS credits
Learning Outcomes	Following the successful participation in this module, students are going to be able to: • apply core philosophical and ethical issues in international development research; • assess their previous knowledge of research approaches and development perspectives in relation to the core philosophical and ethical issues; • analyse presented research approaches and cases from international development practice; • critically assess the use of research designs and research results from different disciplinary traditions in the professional field of international development; • appraise complementarity, ambiguity, contradictions and politics in the professional field of international development research and practice; • appraise roles of development specialists as researchers and practitioners; • critically reflect on concepts and theories concerning complexity, inter-human processes and communication related to social change and innovation in both national and international contexts; • compose a conceptual framework, consisting of an integration of well-chosen concepts and theories for analyzing real-life experiences and practices related to change, inter-human processes and communication; • compose a scientifically sound paper in which a problem, event or phenomenon is analyzed from a dynamic communication perspective; • define, and adjust when and if necessary, with a team and in interaction with a commissioner, the goal of their transdisciplinary-oriented project and a project proposal plan, including research questions, methods of analysis, expected outputs, budget, project planning and management;

	● Improve relevant skills concerning research methodology and writing, ethics and philosophy, personal development, and communication, depending on their own choice of skills training.
Module Content	There are many research-related activities in aid programs and development projects. Different research designs and methodological strategies are used in various stages of development intervention, for different purposes, and with different societal audiences in mind. In the course Critical Reflection on Research in International Development Practice students will learn to reflect critically upon the epistemological, normative, ethical and political aspects of research in international development practice. After learning how to use a framework for reflection, the acquired understanding and reflective skills are applied to a variety of cases and examples of development research in practice. The course also teaches students to understand, analyse and evaluate linkages between methodological preferences, different disciplines and theories of development (inter-, multidisciplinarity). Worldwide social transformation processes, related to livelihoods, agro-food networks and the environment take place in both national and international contexts. Such processes involve changes at different levels. Change is generally discussed in terms of 'what should be done'. In the course Change, Interhuman Processed and Communication we try to understand change and change management by analyzing how people actually communicate when they are confronted with new developments. Starting from a complexity approach, with a focus on inclusion and exclusion processes, we will analyze inter-human processes, as they emerge in interpersonal communication. Resistance to change, for instance, will be discussed with special attention for social identity issues such as group-think, the role of honor and shame and the importance of face-saving. These factors, although in different appearances depending on specific situations and cultures, are often decisive factors in change processes. Related to conflict and negotiation for change we will analyze how people construct frames while communicating, including the goals they pursue in specific interaction contexts and the effect of frames and framing. There will be special attention for self-organization in networks, based on direct interaction between people, resulting in planned and unplanned change. Finally, we will pay attention to the role of storytelling and conversations for social change and transformation. In the Academic Consultancy Training course, teams of 5 to 7 students are assigned to execute a transdisciplinary-oriented academic consultancy project for an external commissioner (for example governmental, private and civil society organizations). These teams are composed on the basis of required disciplinary mix for the execution of the project and the preferences expressed by students. Through an application letter students indicate what their disciplinary knowledge will add to the execution of the project. Each team has an assigned process coach and a content coach/academic advisor relevant to the project. The multidisciplinary and preferably multicultural team will carry out a design type project for their commissioner. This might be the design of new technologies, policy papers, business strategies, regional development arrangements, communication plans or draft research plans for integrated research programmes. Crucial is that teams bring together academic insights and practical knowledge, reach a synthesis of the compiled information in consultation with the commissioner, and translate this into an advice on future actions for their commissioner.
Courses	SE Critical Reflection on Research in International Development Practice (6 ECTS) SE Change, Interhuman Processed and Communication (6 ECTS) IP Academic Consultancy Training (ICT4D related projects) (9 ECTS) VO Modular Skills Training (3 ECTS)
Type of examination	Written, Oral and based on the output of the project.

§13.6. Compulsory Specialization Module 4_P: Digital Communication, Policy and Innovation in Europe II

Workload	24 ECTS credits
Learning Outcomes	The courses of this modules contributes to the following *general learning results* of the master in communication studies. Hence, following the participation in this course, students will improve their knowledge of, or learn to: show in-depth knowledge, understanding and insight within the field of communication sciences and in relation to the latest evolutions and discussions at both the national and international level regarding *media, internet and globalization*; show an open and constructive attitude whilst having respect for other views and beliefs; act upon an open attitude in a culturally diverse international context. They critically reflect on their own (geographical, social, cultural, local, personal, …) position; to discuss and debate current societal and scientific topics and theoretical developments related to *media, internet and globalisation*; to discuss issues on the basis of critical and substantiated reflections and research findings, open-mindedly and willing to acknowledge other arguments; to translate acquired understandings and findings into concrete conclusions, scenarios, advice, policy recommendations and strategies, and are able to communicate and implement these in a professional manner; independently elaborate, organise, plan and conduct their own original research, interpret its results and groundedly, coherently and convincingly communicate it orally and in writing; and to communicate their point of view in a clear and scientific-grounded argumentation to various target groups. **VO Critical Issues in Media Economics** Students demonstrate the ability to critically contextualise and evaluate current national and international developments and discussions, and are able to independently deepen insights related to complex problems on the basis of an original framework of analysis, thereby expanding the theoretical basis related to the field of media economics Students demonstrate the skill to discuss and debate current societal and scientific topics and theoretical developments related to the field of media economics. The students discuss issues on the basis of critical and substantiated reflections and research findings, open-mindedly and willing to acknowledge other arguments. **SE Digital Methods and Innovation** Students will be able to: Recognize and understand the new data types that arise as a consequence of the Internet and related technologies; select, apply on a basic level, and understand a range of digital/data science methods and tools that can be applied to a wide array of social science research issues; understand the practices of the software development methodology in the ICT innovation process as well as the role of the different disciplines within this practice. **VU European Media and Communication Policies (part of Specialised Lecture on Policy)** From their participation in this course, the students will be able to: gain critical insights in the policymaking process in Europe, with special attention to aspects of multilevel governance, and specific attention to the complexities of policymaking; gain theoretical and empirical knowledge of the impact of policy on the national and European level; acquired knowledge of policy initiatives in the media and communications related sector in Europe based on a case study approach of specific domains; increase specific knowledge of the workings of institutions and regulatory processes in the European Union and in different member states, with specific regard to EU media and communications regulation. **VU Data, Privacy and Society (part of Specialiased Lecture on Digital Communication)**

	Following their participation in this course, the students know and define key concepts and central theories on big data, privacy, ethics, literacy and user empowerment, from the perspective of Media and Communication Studies and STS (Science & Technology Studies); can outline and explain the role and meaning of data and privacy from social, economic, technological and regulatory perspective; can clarify, connect and integrate the three perspectives (artefacts, practices and social arrangements) in relation to mediated communication and online platforms; can illustrate and apply key concepts and central theories on data and privacy in a real-life case exercise; can translate the theoretical and practical insights into actionable results for different fields of society in a professional context; can substantiate and debate on the role and meaning of (inter)national developments in data and privacy within social media, sharing economy applications and data technologies, from a critical perspective; embrace and demonstrates an open, critical and interdisciplinary attitude towards issues regarding big data, privacy, ethics, literacy and user empowerment.
Module Content	**UV Critical Issues in Media Economics** This course will treat a number of current issues that are critical for the domain of New Media in Europe. They will be studied from a political economy point of view. The issues relate e.g. to Innovation and Diversity in Media, Advertising and Privacy, Competition and Bottlenecks in New Media Markets, Future Networks for New Media and Net Neutrality. **VU European Media and Communication (Part of Specialised Lecture on Policy)** This course consists of a combination of lectures and group discussions. It aims to provide a broad overview of policy initiatives in the media and communications sector in Europe, by setting out from a thematic approach. The central question addressed in the course is how European and national policy institutions are shaping policies for public interest in the marketplace. This entails, amongst others, issues related to freedom of expression, cultural diversity, quality and trust in media. We tackle these issues by focusing on various cases within European media policies (film support, platform regulation, public broadcasting, etc.). Different thematic building blocks are explored via thematic case studies: policies for Public Service Media in Europe Supporting film and creative industries in Europe; policies for audiovisual content: from television to video sharing platforms; dealing with global platforms (Google, Amazon, Facebook): fake news, illegal content and hate speech, and competition. **VU Internet Censorship, Control and Governance (Part of Specialised Lecture on Policy)** In 1996 John Barlow wrote his famous Declaration of Independence of Cyberspace. The Internet would not be governed by governments or the industry, it would be governed by the Internet Community itself. That ideal seems a far way of now. Critical Internet resources are managed by ICANN, but it's legitimacy is still being challenged. Governments do regulate and control the internet in different fields. This course introduces students to Internet Governance. It focuses on the international debates on Internet Governance. It gives an overview of governments' practices of controlling and regulating the internet. It discusses central themes such as human rights and the internet, censorship and repression, the democratic potential of the Internet, copyright and infringement, etc. **VU Data, Privacy and Society (Part of Specialised Lecture on Digital Communication)** The course takes an interdisciplinary road trip at the role and meaning of data and privacy in mediated communication, online platforms and society, from a social, economic, technological and regulatory perspective. We discuss central theories,

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<td>research, terminology, current issues, and future challenges on big data, privacy, ethics, literacy and user empowerment in different fields of society, from the perspective of Media and Communication Studies and STS (Science & Technology Studies). For this, we incorporate three inextricable and mutually determining components: artefacts, practices and social arrangements. More in particular the lectures take an in-depth look at national and international developments in social media, sharing economy applications and data technologies (e.g. Facebook, Google, Snapchat, Uber, Internet-of-Things, Smart Cities, health apps,…). We apply the knowledge in concrete and interactive class exercises. This is coupled with practical interventions with scientists, government, public organisations (eg Belgian Privacy Commission), companies, civil society organisations, artists and other stakeholders.

VU Media Literacy and Digital Inclusion (Part of Specialised Lecture on Digital Communication)
A classic definition of media literacy is the one constructed at the National Leadership Conference on Media Literacy in 1993: 'Media Literacy is the ability to access, analyze, evaluate, and communicate messages in a variety of forms'. Media literacy is a booming topic in our fast changing digital media environment. At least, at the rhetorical level it is said to be of utmost importance that all people are media literate. The media literacy field is a highly diverse field. In a review of the field in 2013 Potter identifies 23 different definitions of media literacy. Although all theories on media literacy pay attention to a certain level of critical understanding towards media and news content, digitalization of media and the fast innovation in the field have turned attention to levels of access to digital media, to the strengthening of technical skills to deal with computers, tablets and smartphones and the applications running on them. In this course we focus on 1) the theoretical discussions on media literacy, 2) policies on media literacy in selected European countries, at the level of the EU and UNESCO, 3) concrete projects on media literacy in Flanders and Europe.

SE Digital Methods and Innovation
Students will (1) gain advanced knowledge of social science research methods that are used to research new types of data (e.g. hyperlinks, social media networks, algorithmes, …), (2) learn to use these new types of data to answer existing research questions and (3) learn to formulate new research questions (e.g. on social surveillance, algorithmic trading,…), that arise as a consequence of the digitalization and interconnectedness of data. Students will learn the basics of data science, but also critically reflect upon the methodological implications of these changes for the social sciences methodology. Regarding the innovation process of ICTs, students will learn about the management of software development cycles and the interdisciplinary playground when designing, implementing and evaluation of new ICTs.</td>
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<td>Courses</td>
<td>VO Critical Issues in Media Economics (6 ECTS)
SE Digital Methods and Innovation (6 ECTS)
VU Specialised Lecture on Policy (6 ECTS)
VU Specialised Lecture on Digital Communication (6 ECTS)</td>
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<td>Type of examination</td>
<td>Course Examination: individual oral examination and written semester project papers and presentations</td>
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§13.7. Compulsory Specialization Module 4_T: Digital Technology & Management II

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<td>Workload</td>
<td>25 ECTS credits</td>
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<td>Learning Outcomes</td>
<td>Following their participation in the courses of this module, students will be able to :apply theories, methodologies and empirical knowledge for analysing market developments and governance; apply knowledge on technology, business and regulatory developments for analysing and developing appropriate business models and business strategies; analyse industry sectors and markets using and producing</td>
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	communication, media and information technologies; assess the main regulatory issues in relation to ICT infrastructures, services, and content; apply an interdisciplinary approach using theories, methodologies and empirical knowledge for analysing specific issues with relation to communication, media and information technologies; analyse the interaction between technologies, institutions, organisations and markets in a system perspective; identify and apply relevant theories for the synthesis and evaluation of the studied situation; apply knowledge of green ICT and managerial economics as presented in the mandatory semester courses; identify situations of CMI technology related implications for the market; analyse the conditions and implications of the use of communication, media and information technologies for individual users, groups, organizations and society by drawing on technical, organizational and techno-economic perspectives; to distinguish between design and market implications at individual, group, organizational or societal level; perform and analysis of the conditions and implications of communication, media and information technologies in a specific market context; combine theories from different technology, organizational and socio-technical areas to create a multi-faceted understanding of the "problem"; focus on a particular situation of use or a new phenomenon related to new CMI technologies; it could be the conditions and implications related to an organization engaging in outsourcing, or it could be the conditions and needs for new standards.
Module Content	From the courses of this module, the students will gain knowledge of: the social and business environment in which technologies are used; standardisation processes for innovation and in market developments; technology as socio-technical systems where the context of use is pivotal for the value of communication, media and information (CMI) technologies; andof new organizational forms, new business concepts and changes in the market conditions.
Courses	SE Semester Project: Governance and Strategies (15 ECTS) SE Semester Project: Design and Markets (10 ECTS)
Type of examination	Course Examination: Oral group exam with individual grading based on written semester project report

§13.8. Compulsory Specialization Module 4_I: Information & Communication Technologies for Development II

Workload	23 ECTS credits
Learning Outcomes	Following the successful participation in this module, students are going to be able to: ● explain how different disciplines have been applied to the field of international development studies, and contrast the similarities and differences in this regard as they pertain to the four specializations of MID; ● distinguish the way in which different disciplinary perspectives on international development are linked to broader changes in science (epistemology) and shifts in livelihoods, agro-food networks and the environment, and outline the reasons for these linkages; ● assess the value of different themes and theoretical modes of thinking in the domain of international development studies; ● use their in-depth insights about the evolution of specializations to past and current problems in the domain of MID by translating these insights in role playing exercises and thereby practice gamma-gamma-integration; ● identify fields of activity and intervention that relate to inclusive innovation and communication for international development; ● analyse mechanisms/strategies that lead to inclusion or exclusion of vulnerable groups in innovation trajectories;

	- analyse the cross-scale dynamics of innovation and how they relate to inclusion and exclusion mechanisms as well as trade-offs between different development objectives; - assess and evaluate strategies and policies related to knowledge, research and communication that are relevant to fostering inclusive innovation; - compare core concepts and theories at the interface of the study of socio-technical practices, innovation processes and responsible futures; - evaluate the scope and value of three methodological perspectives on integrative research; - relate methodological choices to the challenge of engaging society in innovation for development; - prepare a plan explaining what kind and how much evidence is needed to research and analyse a problem of their own choosing; - learn from the inputs provided and the interactive sections of the Autumn School; - successfully prepare a proposal for a Master's Thesis that will be undertaken during the third and fourth semester.
Module Content	**SE Perspective and Themes in International Development Studies** Development Studies shifted significantly in the last 50 years because of broader societal and scientific transformations. Initially comprising development economics and sociology, it now also includes anthropology, political science, communication and innovation studies, and science, technology and society studies. In Wageningen, together these disciplines focus on social transformation processes related to livelihoods, agro-food networks and the environment. This common course of the Master International Development Studies (MID) gives insight into the paradigm shifts that have occurred in Development Studies. It adopts a diachronic approach, focusing on 'modernization' (from the post-WWII to the early 1970s), 'globalization' (from the mid-1970s to the beginning of the new Millennium), and the contemporary concern with sustainability and global governance processes. What these periods have in common is the intense competition between co-existing development paradigms. By studying and exploring the way in which these paradigms (and their underlying conceptual apparatuses) gradually changed, this common course provides a critical grounding in the field of Development Studies. **SE Politics of Knowledge and Inclusive Innovation** This course zooms in on the mechanisms and configurations that influence whether processes of social and technical innovation and transformation become inclusive, responsive and democratic. Special attention is given to analysing the power and politics involved in processes of knowledge and meaning making in the context of the formulation of development scenarios, the organisation of value chains and communication for development. In doing so, the course considers trade-offs that occur between different scales and societal objectives related to livelihoods, agro-food networks and the environment. Analysis is combined with the evaluation of strategies (notably the formulation of 'theories of change', policy briefs and advocacy campaigns) geared towards bringing about inclusive and equitable innovation and development. **SE Researching Socio-Technical Practices, Innovation and Responsible Futures** The course starts from the premise that science, technology and innovation are transformative. They have the power to create futures and vulnerabilities. Unless we make innovation processes responsive both to the needs of social actors and the bio-material world, future changes will occur without explicit societal shaping, commonly driven by the power of incumbent interests and the delegation of 'the good' to market forces. The course teaches students how to research the relationship between socio-technical practices, innovation processes and responsible futures. In three blocks, students review the systematic for making descriptions of everyday practices, appraise the contextualisation of innovation and change processes in case

	studies, and conceptualise and use deliberative and anticipative methodologies. Each block combines reading of literature, individual or group assignments, and feedback on the reviews and applications of the methodological perspectives examined. The methodologies are contextualized as necessary and appropriate for helping society to get better at the conversation between today and tomorrow in an inclusive and socially robust manner. The course concludes with an individual assignment: writing a paper making a problem and question of own choice researchable. **IP Autumn School II** At the Autumn School, the second year students have a chance to learn from the various activities organised by coordinating institution and carried out by various academics and experts of the partner institutions. Also, the students of the second year present concepts for their thesis in public sessions and in front of a panel of lecturers from partner universities. Normally, the preparatory work for the proposal takes place during the summer and the proposal is submitted a few weeks before the Autumn School. After the presentation, the students have a few weeks to update their proposal and prepare a report describing and commenting on the feedback received.
Courses	SE Perspective and Themes in International Development Studies (6 ECTS) SE Politics of Knowledge and Inclusive Innovation (6 ECTS) SE Researching Socio-Technical Practices, Innovation and Responsible Futures (6 ECTS) IP Autumn School II (5 ECTS)
Type of examination	Written examination, assignments, group presentation, case-study review, paper; Each component needs a minimum mark of 5.5 to pass.

§13.9. Modules 5 & 6: Elective Subjects I & II

Workload	POLINN, TECMAN: 12 ECTS credits; ICT4D: 14 ECTS credits
Learning Outcomes	Following the successful participation in this module and depending on their own choice, students are going to be able to: ● apply diverse team strategies to accomplish certain tasks ● related managerial and entrepreneurial soft skills ● communication trainings ● use business modelling as a tool for setting up and developing businesses delivering as well as using digital services. ● take green aspects of digital technologies and services into consideration with respect to the development and use of digital solutions. ● have knowledge on general managerial economics specifically applied on digital services and applications. ● have knowledge on the implications of standards as well as the development of standards. ● be able to perform a rapid technology and service development project together with fellow students.
Module Content	Generally, elective courses have a focus on the more generic and transferable knowledge, skills and competences and encourage the students to develop self-initiative strategies. Students, however, can also choose to attend additional specialization courses, if they think they are in their own interest. The partner universities will provide suggestions for the students before the beginning of every semester. The course on entrepreneurship, innovation and business models has emphasis on theories and practical approaches to building viable business models. The green ICT course seeks to make students aware of and act upon the environmental issues where digital solutions can be the problem and/or the solution. The managerial eco-

	nomics course provides the students with general knowledge on the basic economics of companies in markets. The standardization course elaborates on the issue of standardization processes and struggles in markets as well as in organizations. Wofie is a week-long technology and service development competition between all students at the university.
Courses	Examples/Suggestions (limited sample): UV Entrepreneurship, Innovation and Business Models UV Green ICT - Sustainable Business Development UV Managerial Economics UV Standardization Language Courses (e.g., Danish, English, etc.) Business and consumer ethics Gender, Diversity and Politics Media Culture and Globalization Theories Language Courses (e.g., English, French, Dutch, etc.) Storytelling Free Software Movement within Digitalisation Process
Type of examination	Course Examination: various. Individual written or oral exam and - in the case of Wofie - participation in a technology and service development competition

§14. Annex II: General Admission Rules to the Erasmus Mundus master's degree programme Digital Communication Leadership (DCLead)

§14.1. General Admission Rules

1. The General Admission rules include all relevant information and requirements concerning the recruitment and selection procedures of the programme DCLead.
2. Any changes on the general admission rules must be decided upon by the Programme Board and made publicly available.

§14.2. Selection Committee and the Selection of Students

1. Information concerning the application procedure, timetable (deadline for application, estimated time for the notification of results, appeal deadline, etc.), and eligibility and selection criteria must be available to all potential applicants at the latest three months before the deadline for application from the website www.dclead.eu.
2. The recruitment of students is undertaken by full Consortium Partners. The selection process is undertaken once a year by the Selection Committee.
3. The Selection Committee is composed of representatives of consortium members, as determined by the Consortium Agreement.

§14.3. Application Requirements

1. An applicant for admission shall hold the equivalent of an academic Bachelor's Degree from a recognized academic higher education institution, corresponding to at least 180 ECTS credits, in a subject relevant to the topic of the master programme and its specializations.
2. Requirements differ between the DCLead study tracks. They are specified in the Consortium Agreement and published on the programme's website (www.dclead.eu).

§14.4. English Proficiency

1. Unless English is their mother language, applicants must demonstrate their English proficiency. This can be done through the following tests and diplomas:
    i. IELTS (academic test): minimum average score 6.5 [www.ielts.org]
       o Additionally, for the track ICT4D the minimum sub-score for speaking is 6
    ii. TOEFL (paper-based): 560 [www.ets.org/toefl]
    iii. TOEFL (internet-based, or iBT): 92[www.ets.org/toefl]
       o Additionally, for the track ICT4D the minimum sub-score for speaking is 23
    iv. Cambridge Certificate of Proficiency (CPE), Grades A,B, or C [www.cambridgeenglish.org]
    v. Certificate in Advanced English (CAE), Grades A, B, or C [www.cambridgeenglish.org]
    vi. Cambridge First Certificate with the grade A. [www.cambridgeenglish.org]
2. For applicants who have already completed a Bachelor's Degree or another University Degree that was entirely held in English, from an institution based in either Australia, the UK, Ireland, USA, New Zealand, South Africa or Canada, this counts as sufficient demonstration of their English proficiency.

§14.6. Selection Procedure

1. The Programme Board shall agree upon the number of students admitted to the programme annually.
2. The call for applications to the programme will open by 1 October and ends by 31 December, approximately 9 months before the selected students take part in the programme.
3. The Selection Committee prepares a shortlist of candidates including reserves.
4. Members of the Selection Committee interview shortlisted candidates and share the results of the interviews with the rest of the Committee.
5. Based on the input from the Selection Committee, the administrator prepares four lists of candidates for the Programme Board: (1) eligible, selected; (2) eligible, reserve; (3) eligible, not selected, and (4) non-eligible.
6. After approval of the list by the Selection Committee, the administrator informs the candidates of the result of their application.

§14.9. Final Admission procedures

1. Final admission is dependent on the submission of the original documents, the positive admission confirmation by the Programme Board, and the acceptance of the documents by the coordinating institution.

§15. Annex III: DCLead Grading Scale & Conversion

1. All exams and other deliverable submitted by DCLead students must be graded using the DCLead percentage grade scale.
2. For different 'brackets' of the DCLead grading scale correspond to different levels of the ECTS credits scale, as indicated in the table below.
3. The ECTS Credits scale must be interpreted as follows:
   - EXCELLENT - outstanding performance with only minor errors
   - VERY GOOD - above the average standard but with some errors
   - GOOD - generally sound work with a number of notable errors
   - SATISFACTORY/ SUFFICIENT - fair but with significant shortcomings / performance meets the minimum criteria
   - NOT PASSED - some more work required before the credit can be awarded / considerable further work is required

ECTS Credits Scale	ECTS Credits Grade	DCLEAD Percentage Grade	PLUS	VUB	AAU	WU
Excellent	A	100-88	Sehr Gut (1)	20-18	12	10-8,5
Very Good	B	87-75	Gut (2)	17-15	10	8-7,5
Good	C	74-62	Befriedigend (3)	14-13	7	7
Satisfactory / Sufficient	D/E	61-50	Genügend (4)	12-10	4 /2	6,5-6
Not passed	Fx/F	49-0	Nicht genügend (5)	<10	0 / -3	< 5

§16. Annex IV: Abbreviations

The following abbreviations have been used throughout the of the DCLead Curriculum:

AAU	Aalborg University
approx.	approximately
DCLead	Digital Communication Leadership
ECTS	European Credits Transfer System
EMJMD	Erasmus Mundus Joint Master Degree
IP	Interdisciplinary Project
KO	Konversatorium (colloquium)
MA	Master of Art
MSc	Master of Science
PLUS	Paris-Lodron-Universität Salzburg
SE	Seminar
UV	Übung mit Vorlesung (exercise combined with lecture)
VO	Vorlesung (lecture)
VU	Vorlesung mit Übung (lecture combined with exercise)
VUB	Vrije Universiteit Brussel
WU	Wageningen University