# Pre-approved Courses 2022

#### IT-University of Copenhagen

The purpose of this document is to provide an overview of which courses it is possible to take, when studying abroad or at other universities in Denmark.

Please note that we cannot guarantee that your courses will be approved as listed. Each application for approval must be documented as described at ITU Student, and each application will be assessed individually.

Please also note that the courses are not always listed so that the course at the host university is equivalent to the ITU course regarding ECTS weight. Therefore, you might need to apply for more courses to cover an ITU-course.

#### Contents

1.	BSc Global Business Informatics	2
	BSc Digital Design and Interactive Technologies	
	BSc Software Development	
	BSc Data Science	
	MSc Digital Innovation and Management	
	MSc Digital Design and Interactive Technologies	
	MSc Software Design	
8.	MSc Computer Science	16
	MSc Games	
10	MSc Data Science	10

#### 1. BSc Global Business Informatics

University	Course	ECTS	Course	ECTS
(Abroad)	(ITU)	(ITU)	(Abroad)	(Abroad)
Algoma University (Canada)	IT, Globalization & Culture	15	Anishinaabe Peoples and Our Homelands	6
	Elective	7.5	Data Structures I	6
	Elective	7.5	E-Business Strategy, Architecture and Design	6
	IT, Globalization & Culture	15	Human Services Organizations	6
	IT-enabled Supply Chain Management	7.5	Introduction to Canadian Business	6
	IT, Globalization & Culture	15	Introduction to International Relations	6
	IT-enabled Supply Chain Management	7.5	Management Skills and Secondary Research Methods	6
	IT-enabled Supply Chain Management	7.5	Quantitative Management Decision- Making	6
	Elective	7.5	Social and Ethical Issues in Business	6
Boston University (USA)	IT, Globalization & Culture	15	Business in a Changing Society	7.5
	IT, Globalization & Culture	15	International Business Management	7.5
	IT-enabled Supply Chain Management	7.5	Operations Management	7.5
	IT, Globalization & Culture	15	The Innovation Process: Developing New Products and Services	7.5
Frankfurt School of	Elective	7.5	Applied Persuasion	6
Finance & Management	Elective	7.5	Blockchain	6
(Germany)	IT-enabled Supply Chain Management	7.5	Business Strategy	6
	IT, Globalization & Culture	15	Challenges of the European Union and the Euro Area	6
	IT, Globalization & Culture	15	Consumer Behaviour	6
	IT-enabled Supply Chain Management	7.5	Corporate Sustainability Strategy	6
	IT, Globalization & Culture	15	Economic Growth and Development	6
	IT, Globalization & Culture	15	Environmental Economics and Energy Finance	6
	IT, Globalization & Culture	15	Industry Practice	6
	IT-enabled Supply Chain Management	7.5	Industry Practice	6
	IT, Globalization & Culture	15	International Trade and Economic Integration	6
	Elective	7.5	Leadership	6
	IT, Globalization & Culture	15	Leadership	6

	IT, Globalization &	15	Market Economy and Regulatory	6
	Culture		Frameworks	
	Elective	7.5	Risk Management	6
	IT, Globalization & Culture	15	Strategic competition	6
	IT-enabled Supply Chain Management	7.5	Strategic Competition	6
	IT, Globalization & Culture	15	The future of banking in a digitalized world	6
	IT-enabled Supply Chain Management	7.5	The future of banking in a digitalized world	6
	IT-enabled Supply Chain Management	7.5	Trading and Sales	6
Griffith University (Australia)	Elective	7.5	Applied Human Ressource Management and Change	7.5
	Elective	7.5	Digital Innovation	7.5
	Elective	7.5	Export Management	7.5
	IT, Globalization & Culture	15	Global Business	7.5
	IT, Globalization & Culture	15	Intercultural Communication	7.5
	IT-enabled Supply Chain Management	7.5	International Business Logistics	7.5
	IT, Globalization & Culture	15	Language, Culture and Society	7.5
	Elective	7.5	Leading and managing organisations	7.5
	IT-enabled Supply Chain Management	7.5	Operations Management	7.5
	IT, Globalization & Culture	15	The business of changing the world	7.5
Hanyang University	Elective	7.5	Business Data Analysis	6
(South Korea)	IT, Globalization & Culture	15	Business Ethics and Sustainability Management	6
	IT, Globalization & Culture	15	Case Study of Cultural Content Business	6
	IT, Globalization & Culture	15	Consumer Behavior	6
	Elective	7.5	Data analysis using Python	6
	Elective	7.5	Energy Security and Geopolitics in Asia	6
	Elective	7.5	Global Entrepreneurship-Launch your startup	6
	IT, Globalization & Culture	15	Global Politics & Economy	6
	IT, Globalization & Culture	15	Globalization	6
	IT, Globalization & Culture	15	Globalization, Ethics & International Development	6
	Elective	7.5	International Business	6
	IT, Globalization & Culture	7.5	International Business	6
	IT, Globalization & Culture	7.5	International Marketing	6
	Elective	7.5	International Relations in East Asia	6

	IT, Globalization & Culture	15	International Strategic Management	6
	IT-enabled Supply Chain	7.5	Logistics Management	6
	Management	7.5	Lastinities Contains Application	
	Elective	7.5	Logistics System Analysis	6
	Elective	7.5	Macroeconomics 2	6
	IT, Globalization & Culture	15	Management of Global Corporations	6
	Elective	7.5	Marketing Management	6
	IT-enabled Supply Chain Management	7.5	Operations Management	6
	Elective	7.5	Organization Management	6
	IT, Globalization &	15	Organizational behavior	6
	Culture			
	IT, Globalization & Culture	15	Strategic Management	6
	IT-enabled Supply Chain Management	7.5	Supply Chain & Logistics Management	6
	IT, Globalization & Culture	15	Technology & Politics	6
	Elective	7.5	Understanding Artificial Intelligence	6
	IT, Globalization &	15	Understanding Global Affairs	6
	Culture		onderstanding Global / Mails	
	IT, Globalization &	15	Understanding Globalization	6
	Culture		<b>3</b>	
	Elective	7.5	Understanding International Business	6
	IT, Globalization & Culture	15	World Business Culture	6
Inha University (South Korea)	IT, Globalization & Culture	15	Cultural studies and cyberspace	5
no.ca,	IT-enabled Supply Chain Management	7.5	Financial management	5
	IT, Globalization & Culture	15	Macroeconomics	5
	IT-enabled Supply Chain Management	7.5	Macroeconomics	5
	IT, Globalization & Culture	15	Organizational behavior	5
Queensland University	IT, Globalization & Culture	15	Bridging Cultures	7.5
of Technology (Australia)	IT, Globalization &	15	Business Environment	7.5
	Culture IT, Globalization &	15	Developing Cultural Intelligence	7.5
	Culture Elective	7.5	Intercultural Communication and	7.5
			Negotiation Skills	
	IT, Globalization & Culture	15	Intercultural Communication and Negotiation Skills	7.5
	IT-enabled Supply Chain Management	7.5	International Logistics	7.5
	IT-enabled Supply Chain Management	7.5	International Logistics Management	7.5

	IT, Globalization & Culture	15	Internationalisation	7.5
	Elective	7.5	Introducing Human Ressource  Management	7.5
	Elective	7.5	Introduction to Web Design	7.5
	Elective	7.5	Managing People	7.5
	IT-enabled Supply Chain Management	7.5	Monitoring and Managing Operational Performance	7.5
	Elective	7.5	The Future Enterprise	7.5
Singapore Management	Elective	7.5	COR2100 (Economics and Society	7.5
University (Singapore)	IT, Globalization & Culture	15	ECON113 (Economics of Globalisation	7.5
	IT, Globalization & Culture	15	ECON203 (International Economics	7.5
	IT, Globalization & Culture	15	MGMT.205 (International Business	7.5
	Elective	7.5	MGMT.218 (Entre. & Bus. Creat'n	7.5
	Elective	7.5	Money, Banking and International Finance	7.5
	IT-enabled Supply Chain Management	7.5	OPIM314 (Logistics & Transportation Mgt	7.5
	IT-enabled Supply Chain Management	7.5	OPIM321 (Supply Chain Management	7.5
	IT-enabled Supply Chain Management	7.5	OPIM324 (Global Supply Chains	7.5
University Carlos III of	Elective	7.5	Digital product development	6
Madrid (Spain)	IT-enabled Supply Chain Management	7.5	Digital supply chain	6
	IT, Globalization & Culture	15	Global business management	6
	IT, Globalization & Culture	15	Global information systems	6
	Elective	7.5	Organization design	6
NOVA University Lisbon (Portugal)	IT, Globalization & Culture	15	Artificial Intelligence	6
	IT-enabled Supply Chain Management	7.5	Artificial Intelligence	6
	IT, Globalization & Culture	15	Business Management	4
	IT-enabled Supply Chain Management	7.5	Business Management	4
	IT, Globalization & Culture	15	Business Strategy and Digital Transformation	6
	IT-enabled Supply Chain Management	7.5	Business Strategy and Digital Transformation	6
	Elective	7.5	Computation I	7
	Elective	7.5	Cybersecurity	4
	IT, Globalization & Culture	7.5	Data Analysis	6
	Elective	7.5	Data Pre-processing	4
	Elective	7.5	Geospatial intelligence	4
	IT, Globalization & Culture	15	Information Systems	6

	IT, Globalization &	15	Market Research	4
	Culture			
	IT, Globalization &	15	Organizations behavior	4
	Culture			
	IT, Globalization &	15	Personal Development II	2
	Culture			
	IT-enabled Supply Chain	7.5	Personal Development II	2
	Management			
University of	Elective	7.5	Decision Psychology	3
Montpellier (France)	Elective	7.5	Export Strategy	3
	IT, Globalization &	15	Intercultural Management	3
	Culture			
	IT-enabled Supply Chain	7.5	International Distribution and Sales	3
	Management			
	IT, Globalization &	15	International Marketing Mix	3
	Culture			
	IT, Globalization &	15	International Negotiation	3
	Culture			
	IT-enabled Supply Chain	7.5	Introduction to Finance and	3
	Management		International Budgeting	
	IT-enabled Supply Chain	7.5	Psychosociology	3
	Management		,	
	Elective	7.5	Strategic Marketing	3
	Elective	7.5	World Economy	3
University of North	IT, Globalization &	15	Global Information Systems	7.5
Carolina Wilmington	Culture			
(USA)	Elective	7.5	Green Business and Sustainable	7.5
			Enterprise	
	IT-enabled Supply Chain	7.5	IT Resource Planning and Management	7.5
	Management			
	Elective	7.5	Managing Innovation and Technology	7.5
	IT-enabled Supply Chain	7.5	Supply Chain Modelling and Analysis	7.5
	Management			

# 2. BSc Digital Design and Interactive Technologies

University (Abroad)	Course (ITU)	ECTS (ITU)	Course (Abroad)	ECTS (Abroad)
Georgia Institute of	Electives	7.5	Communication & Culture	7.5
Technology (USA)	Concept Development	15	Principles of Visual Design	7.5
	Concept Development	15	Principles of Information Design	7.5
University of Technology Sydney (Australia)	Konceptudvikling med Virksomhed	15	Innovation Lab	7.5
	Konceptudvikling med Virksomhed	15	Product Design Professional Communication	7.5

# 3. BSc Software Development

University	Course E		Course	ECTS	
(Abroad)	(ITU)	(ITU)	(Abroad)	(Abroad)	
City University of Hong Kong	Distributed Systems	7.5	CS3201 Computer Networks	3	
(Hong Kong)	Second Year Project:	15	GE2313 Global IT Case Studie	7.5	
	Software Development in				
	Large Teams				
	Second Year Project:	15	CS4348 Software Quality	7.5	
	Software Development in		Management		
	Large Teams				
	Operating Systems and C		CS3103 Operating Systems	7.5	
	Elective	7.5	CS4188 Virtual Reality	7.5	
	Elective	7.5	CS4386 Al Game Programming	7.5	
	Elective	7.5	CS4296 Cloud Computing	7.5	
	Elective	7.5	CS4486 Artificial Intelligence	7.5	
Hanyang University (South	Distributed Systems	7.5	Computer Networks	6	
Korea)	Operating Systems and C	7.5	Creative Software Design	6	
	Analysis, Design and	15	Software Development Practices	6	
	Software Architecture				
	Analysis, Design and	15	Software Engineering:	6	
	Software Architecture				
Minerva University (USA)	Functional Programming	7.5	CS111A Continous Mathematical Systems	2.5	
Technical University of	Second Year Project	15	Praktikum – IPraktikum, iOS	10	
Munich (Germany)			Praktikum		
	Second Year Project	15	Seminar Data Mining	5	
	Functional Programming	7.5	Functional Programming and Verification	5	
	Functional Programming/	7.5	Founding and Leading small	2	
	Elective		Software-oriented Companies		
	Elective	7.5	Linear Algebra and Informatics	8	
Università della Svizzera	Operating Systems and C	7.5	Systems Programming	6	
italiana (Switzerland)	Operating Systems and C	7.5	Software Performance	6	
	Elective	7.5	Artificiel Intelligence	6	
	Elective	7.5	Information Retrieval	6	
Maastricht University	Second Year Project:	15	KEN2600 Project 2-2	6	
(Netherlands)	Software Development in				
	Large Teams				
	Elective		KEN2120 Philosophy & Artificial		
			Intelligence		
	Elective		KEN2430 Mathematical		
			Modelling		
	Elective		KEN2520 Linear Programming		

#### 4. BSc Data Science

University	Course	ECTS	Course	ECTS
(Abroad)	(ITU)	(ITU)	(Abroad)	(Abroad)
University of Hong Kong (Hong Kong)	Machine Learning	15	Machine Learning, CS4487	6
			Applied Statistics, MA3518	6
			Elementary Numerical Methods, MA3525	6
	Introduction to Database Systems	7.5	Database Systems	6
	Elective	7.5	Analytics using SAS, MS3251	6
	Elective	7.5	Java Programming, CS2360	6
University of Technology Sydney (Australia)	Technical Communication	7.5	Communication for IT professionals	7.5
	Software Development and Software Engineering	7.5	Applications Programming	7.5
	Operating Systems and C	7.5	Fundamentals of C Programming	7.5
	Operating Systems and C	7.5	Application Development with .NET	7.5
	Security and Privacy	7.5	Cybersecurity	7.5
	Business Foundations	7.5	Fundamentals of Business Finance	7.5
	Organisation and Process Theory	7.5	People and Organisations	7.5

# 5. MSc Digital Innovation and Management

University (Abroad)	Course (ITU)	ECTS (ITU)	Course (Abroad)	ECTS (Abroad)
Autonomous	Individual specialisation	15	Advanced Digital Marketing for Managers	6
University of	Organizational Change	7.5	Business Ethics	6
Barcelona (Spain)	Individual specialisation	15	Business Ethics	6
	Organizational Change	7.5	Developing creativity and creative cultures in organisations	6
	Cross-Disciplinary Teamwork	7.5	Intercultural communication and management	6
	Organizational Change	7.5	Intercultural Communication and Management	6
	Individuel specialisering	7.5	Managing pricing strategies	6
	Individuel specialisering	7.5	Managing product and brand promotions: Integrated communications for effective marketing	6
	Elective	7.5	Managing Product and Brand Promotions: Integrated communications for Effective Marketing	6
Boston University (USA)	Cross-Disciplinary Teamwork	7.5	Agile Software Development	7.5
	Individuel specialisering	7.5	Enterprise Architecture	7.5
	Organizational Change	7.5	Information Technology Project Mangement	7.5
	Individuel specialisering	7.5	Software Quality, Testing and Security Management	7.5
James Cook	Elective	7.5	Business Consulting	7.5
University (Australia)	Individual specialisation	15	Business Innovation and Technology  Management	7.5
	Elective	7.5	Corporate Strategy	7.5
	Elective	7.5	Data Analysis and Decision Modelling	7.5
	Individual specialisation	15	E-strategic Management	7.5
National Taipei	Elective	7.5	Big Data Analytics	6
University of	Elective	7.5	Data and Decision	6
Technology	Elective	7.5	Financial Technology	6
(Taiwan)	Elective	7.5	International Advertising and Media Strategy	6
	Elective	7.5	Marketing Management	6
	Individuel specialisering	15	Operations management	6
	Individuel specialisering	15	Production R & D Innovation  Management	6
	Individuel specialisering	15	Supply Chain Management	6
San Diego State University (USA)	Elective/Specialisation part 2	7.5	Business Analytics (MIS-649)	10
	Organisational Change	7.5	Business Consulting (BA-795)	10
	Elective/Specialisation part 2	7.5	Business Systems Analytics & Design (MIS-695)	10
	Elective/Specialisation part 2	7.5	Enterprise Database Management (MIS-686)	10

	Elective/Specialisation part 2	7.5	Managerial Marketing (BA-672)	10
	Organisational Change	7.5	Organizational Behavior & Leadership (BA-673)	9 / 12
	Cross-Disciplinary Teamwork	7.5	Organizational Behavior and Leadership	7.5
	Elective/Specialisation part 2	7.5	Professional Development (Field Studies in Business) (BA-780)	10
	Elective/Specialisation part 2	7.5	Seminar in Sales Management (MKTG-763)	10
	Individuel specialisering	7.5	Seminar in Science, Technology, and Homeland Security	7.5
	Organizational Change	7.5	Seminar: Organizational Communication	7.5
	Elective/Specialisation part 2	7.5	Strategic Thinking (BA-676)	10
	Elective	7.5	Business Analytics	10
	Organizational Change	7.5	Business Consulting	10
	Specialization	15	Business Systems and Analysis design	10
	Organizational Change	7.5	Decision support systems	10
	Elective	7.5	Electronic businesses and big data infrastructures	10
	Elective	7.5	Enterprise Database management	10
	Specialization	15	Entrepreneurship	10
	Organizational Change	7.5	Organisational Bahavior & Leadership	10
	Organizational Change	7.5	Strategic thinking	10
Università della	Individual Specialization	15	Analytical Thinking	3
Svizzera italiana	Individual Specialization	15	Enterprise Resource Planning	6
(Switzerland)	Individual Specialization	15	Enterprise Resource Planning Lab	3
	Individual Specialization	15	Essentials of Corporate Finance	6
	Individual Specialization	15	Lean Six Sigma	6
	Elective	7.5	Lean Six Sigma	6
	Individual Specialization	15	Machine Learning	6
	Elective	7.5	Machine Learning	6
	Organizational Change	7.5	Organizational behavior	6
	Elective	7.5	Probability Statitstics	6
University of	Elective	7.5	Big Data (AEBC0005)	3
Montpellier	Individual Specialization	15	Business Game (AEGC0004)	3
(France)	Individual Specialization	15	Business Process Management (AEBC0006)	3
	Elective	7.5	E-Marketing & Sales Force (AEGC0002)	3
	Organizational Change	7.5	European Culture (AEGC0003)	3
	Individual Specialization	15	Innovation Management (AEGU0006)	6
	Organizational Change / elective	7.5	International Strategy (AEGC0001)	3
	Organizational Change	7.5	IT for Human Resources Management (AEBC0004)	3
	Individual Specialization	15	Technologies Management (AEGU0005)	3
University of	Individuel specialisering	7.5	Data Science for Innovation	10
Technology Sydney	Individuel specialisering	7.5	Data Visualisation and Visual Analytics	7.5
(Australia)	Elective	7.5	Enabling Enterprise Information Systems	7.5
	Individuel specialisering	7.5	Enterprise Information Systems	7.5

Cross-Disciplinary Teamwork	7.5	Fundamental of Data Analytics	7.5
Cross-Disciplinary Teamwork	7.5	Influence in the Digital World	10
Individuel specialisering	7.5	IT Professional and Society	7.5
Elective	7.5	IT Professional and Society	7.5
Cross-Disciplinary Teamwork	7.5	Managing in a Multicultural World	7.5
Organizational Change	7.5	Managing Change	7.5
Cross-Disciplinary Teamwork	7.5	Storytelling and Sense-making Studio	7.5
Cross-Disciplinary Teamwork	7.5	The Innovation Lab	7.5

# 6. MSc Digital Design and Interactive Technologies

University	Course	ECTS	Course	ECTS
(Abroad)	(ITU)	(ITU)	(Abroad)	(Abroad)
Istituto Europeo di Design (Italy)	Elective	7.5	Graphical Design in Branding	10
	Elective	7.5	UX Writing	10
Algebra University College	Elective	7.5	Artificial Intelligence + report	7.5
(Croatia)	Elective	7.5	Digital Marketing + report	7.5
Polytechnic University of Milan	Elective	7.5	Final Design Studio	7.5
(Italy)	Elective	7.5	Digital Art	7.5
	Værdier og etik i	7.5	Inclusive Design	7.5
	design			
	Værdier og etik i	7.5	Advanced User Interfaces	7.5
	design			
Kyoto University (Japan)	Situating	15	Seminar on Cognitive Science	6
	Interactions		Speech Processing (Advanced)	6
			System-Level Design Methodology	6
			for SoCs	
	Værdier og etik i	7.5	Biosphere Informatics	6
	design			
	Valgfag	7.5	Computational Learning Theory	6

#### 7. MSc Software Design

University (Abroad)	Course (ITU)	ECTS (ITU)	Course (Abroad)	ECTS (Abroad)
National Taipei	Elective	7.5	Digital Communications	7.5
University of Technology	Elective	7.5	Computer Communication Networks	7.5
(Taiwan)	Elective	7.5	EXCEL VBA programming	7.5
	individual specialization	15	Big Data Analytics	7.5
	individual specialization	15	Data and Decision	7.5
NOVA University Lisbon	Elective	7.5	Business Intelligence	7.5
(Portugal)	individual specialization	7.5	Machine Learning	7.5
	individual specialization	7.5	Descriptive Methods of Data Mining	7.5
Polytechnic University of	Software Engineering	7.5	Software Verification And Validation	4
Madrid (Spain)	Software Engineering	7.5	Agile Software Development: Agile Practices And Agile Usability	4
	Individual specialisation	3	Data Visualization	3
	Individual specialisation	3	Big Data	3
	Individual specialisation	4.5	Machine Learning	4.5
	Individual specialisation	4.5	Intelligent Systems	4.5
Reykjavík University	Elective	7.5	Applied Data Science	7.5
(Iceland)	Software Engineering	7.5	Software Project Management	7.5
	individual specialisation	7.5	Natural Language Processing	7.5
	individual specialisation	7.5	Advanced topics in Artificial Intelligence	7.5
University of Technology	Elective	7.5	LANS and Routing	7.5
Sydney (Australia)	Elective	7.5	.NET Application Development	7.5
	Elective	7.5	Advanced Internet Programming	7.5
	Elective	7.5	Advanced Data Analytics Algorithms	7.5
	Elective	7.5	Advanced Interaction Design	7.5
	Elective	7.5	Game Development	7.5
	individual specialisation	7.5	Cybersecurity	7.5
Technical University of Catalonia (Spain)	Elective	7.5	Statistical Modelling and Design of Experiments	6
	Elective	7.5	Intelligent Data Analysis Applications in Business	2
	Elective	7.5	Process-Oriented Data Science	6
	Elective	7.5	Data Warehousing	6
	Elective	7.5	Introduction to Machine Learning	5
	Elective	7.5	Intelligent Data Analysis and Data Mining	4.5
	Elective	7.5	Future Internet Networks	6
	Elective	7.5	Geometric Tools for Computer Graphics	6
	Elective	7.5	Data Analysis and Knowledge Discovery	6
	individual specialisation	7.5	Big Data Analytics	4.5
	individual specialisation	7.5	Optimization Techniques for Data Mining	6

individual specialisation	7.5	Concurrence, Parallelism and Distributed Systems	6
individual specialisation	7.5	Randomized Algorithms	6
individual specialisation	7.5	Complex and Social Networks	6
individual specialisation	7.5	Information Retrieval	6

## 8. MSc Computer Science

University (Abroad)	Course (ITU)	ECTS (ITU)	Course (Abroad)	ECTS (Abroad)	
Kyoto University (Japan)	Elective	7.5	Theory of Computational Complexity	7.5	
	Elective	7.5	Seminar on Cognitive Science	7.5	
	Elective	7.5	Biosphere Informatics	7.5	
	Individual Specialization	7.5	Computational Learning Theory	5	
	Individual Specialization	7.5	Seminar on Intelligence Science and Technology IV	5	
	Individual Specialization	7.5	Seminar on Intelligence Science and Technology III	5	
	Research Project	7.5	Perspectives in Informatics 5	7.5	
Queensland University of	Elective	7.5	IFN507 Network Systems	7.5	
Technology (Australia)	Elective	7.5	ENN524 Mobile Network Engineering	7.5	
	Elective	7.5	IFN692 Interaction Design for Emerging Technologies	7.5	
	Individual Specialization	7.5	IFN649 Advanced Network	7.5	
	Individual Specialization	7.5	INF663 Advanced Enterprise Architecture	7.5	
University of Technology Sydney (Australia)	Elective	7.5	32570 Enterprice Architecture Practice	7.5	
	Elective	7.5	42850 Natural Language Processing Algorithms	7.5	
	Elective	7.5	320513 Machine Learing	7.5	
	Elective	7.5	32004 Game Development	7.5	
	Elective	7.5	32524 LANS and Routing	7.5	
	Individual Specialization	7.5	42043 Robotics Studio	15	
	Individual Specialization	7.5	49329 Control of Mechatronic Systems	7.5	
	Individual Specialization	7.5	49325 Computer-aided Mechanical Design	7.5	
	Individual Specialization	7.5	49274 Advanced Robotics	7.5	
	Individual Specialization	7.5	41118 Artificial Intelligence in Robotics	7.5	
Universidad Politécnica de Madrid (Spain)	Elective	7.5	Seminars	10	
	Elective	7.5	Correctness by construction	6	
	Elective	7.5	Time Series Data Mining	3	
	Elective	7.5	Bayesian Networks	3	
	Elective	7.5	Design of Corporate Cybersecurity Strategies	3	
	Elective	7.5	Forensic Evidence	3	
Technical University Munich (Germany)	Elective	7.5	IN2083 Project Organisation and Management in Software Engineering	7.5	

Elective	7.5	IN2087 Software Engineering for	7.5
		Business Applications - Master's	
		Course	
Elective	7.5	IN2106 Practical Course – Agile	7.5
		Project Management (IN0012,	
		IN2106, IN2175,IN4206)	
Elective	7.5	IN4320 Practicum: Advanced	7.5
		Python Programming	
Elective	7.5	IN2106 Practical Course –	7.5
		Algorithms for Programming	
		Contests (IN0012,IN2106,	
		IN4205)	

#### 9. MSc Games

University	Course	ECTS	Course	ECTS
(Abroad)	(ITU)	(ITU)	(Abroad)	(Abroad)
Interfaculty - Royal Conservatoire and The Royal	Play Lab	15	Pataphysics	2
Academy for Fine Arts (Netherlands)			AIOTMLWTF	4
			Quick and Dirty	2
			Cognitive Dissonance	4
			Bootstrapping	4
			Computational Arts	

## 10. MSc Data Science

University (Abroad)	Course (ITU)	ECTS (ITU)	Course (Abroad)	ECTS (Abroad)
Ajou University	Elective	7.5	Human Centered Artificial Intelligence	7.5
(South Korea)	Elective	7.5	Advanced Artificial Intelligence	7.5
	Elective	7.5	Theory and Applications of Reinforcement Learning	7.5
	Elective	7.5	Seminars in Global Management	7.5
	Elective	7.5	Computer Programming for Data Processing	7.5
	Elective	7.5	Computational Finance	7.5
	Elective	7.5	Big Data and Fintech	7.5
	Elective	7.5	Computer Vision	7.5
	Elective	7.5	Venture Marketing Management	7.5
	Elective	7.5	Stochastic Calculus	7.5
Polytechnic	Elective	7.5	Recommender Systems	5
University of Milan	Elective	7.5	Natural Language Processing	5
(Italy)	Elective	7.5	Uncertainty in Artificial Intelligence	5
	Elective	7.5	Biomedical Signal Processing and Medical Images	5
	Elective	7.5	Computer Ethics	5
	Elective	7.5	Systems and Methods for big and unstructured data	5
	Elective	7.5	Data and Information Quality	5
	Elective	7.5	Data Management for the Web	5
	Elective	7.5	Data Mining	5
Technical University	Elective	7.5	Complex and Social Networks	6
of Catalonia (Spain)	Elective	7.5	Open Data	6
	Elective	7.5	Cognitive Interaction with Robots	4.5
	Elective	7.5	Computational Intelligence	5
	Elective	7.5	Introduction to Multiagent Systems	5
	Elective	7.5	Human Language Engineering	4.5
	Elective	7.5	Bioinformatics and Statistical Genetics	6
	Elective	7.5	Algorithmic Methods for Mathematical Models	6
	Elective	7.5	Big Data Analytics	4.5
	Elective	7.5	Artificial Vision & Pattern Recognition	4.5
	Elective	7.5	Optimization Techniques for Data Mining	6
	Elective	7.5	Deep Learning for Medical Image Analysis	3
Reykjavík University	Elective	7.5	T-720-ATAI Advanced topics in Artificial Intelligence.	7.5
(Iceland)	Elective	7.5	T-796- DEEP Introduction to Deep learning	7.5
Technical University	Elective	7.5	Legal Data Science and Informatics	6
of Munich	Elective	7.5	Think. Make. Start.	6
(Germany)	Elective	7.5	Introduction to Quantum Computing	5
	Elective	7.5	Visual Data Analytics	5
	Research Project	7.5	Program Optimization	8
University of California, Berkeley	Elective	7.5	Opportunity Recognition: Technology and Entrepreneurship in Silicon Valley	7.5
(USA)	Elective	7.5	Pricing	7.5
(00/1)	Elective	7.5	Negotiation and Conflict Resolution	7.5
	Elective	7.5	Entrepreneurship: New Venture Discovery	7.5
	Elective	7.5	Big Data and Development	7.5

Elective	7.5	Deep Reinforcement Learning, Decision Making, and Control	7.5
Elective	7.5	Computer Vision	7.5
Elective	7.5	Learning and Optimization	7.5