

Zero Defect Manufacturing for Circular Economy Programme

- Study plan -

Grenoble - Aalto collaboration

General structure of the EIT-M Master Programme

Type of modules	Total credits for EIT-M Master	Total credits 1 st year	Total credits 2 nd year
Technical courses (TC)	45	40-50	10-20
Specialization courses (SC)	15		
Innovation & entrepreneurship courses (I&E)	30	10-20	10-20
Master thesis (MT)	30	0	30
Tot	120	60	60

Entry university Grenoble – exit university Aalto

1st year - Grenoble INP

Type of modules	UCD courses	ECTS	Semester	Total credits
TC	Sustainability in industrial engineering and economics	S1	6	
	Information systems management, including project	S1	6	
	Performance evaluation of production systems	S1	3	
	Sustainable design, management and economics	S2	6	
	Discrete event simulation	S2	6	
	Data analytics for industrial engineering	S2	3	
SC	Quality and process development	S1	3	
	Production and operations management, including project	S2	6	
I&E	Sociology, environment and innovation, including challenge	S1	6	
	Intercultural communication and collaborative engineering design 1	S1	6	
	Collaborative engineering design project 2	S2	6	
	Innovative problem solving and bio-inspired innovation	S2	3	

2nd year Aalto

- Language course (mandatory degree requirement at Aalto, e.g. LC-1310 Academic Communication for Msc students) on top of the 60 ECTS
- Summer school included in 2nd year I&E module

Type of modules	Aalto courses	ECTS	Semester	Total credits
TC	MEC-E7007 Factory Project (mandatory)	5	1	5
	<i>Select 1 of the following:</i>		1	5
	ELEC-E8102 Distributed and Intelligent Automation Systems	5	1	
	ELEC-E8714 Sustainable Electronics	5	1	
	MEC-E1001 Mechanical Engineering in Society	5	1	
	ELEC-E8103 Modelling, Estimation and Dynamic Systems	5	1	
SC	MEC-E1090 Quality Management and Metrology (mandatory)	5	1	5
Other	LC-XXXX Compulsory language course	3	1	3
I&E	Centrally organized summer school	5	1*	5
	TU-E4100 Startup Experience	9	1	9
	TU-C2080 Entrepreneurship Essentials	1	1	3
MT	Master thesis	30	2	63

Recap

Type of modules	ECTS in S1	ECTS in S2	ECTS in S3	ECTS in S4	Total credits
TC	15	15	10		40
SC	3	6	5		14
I&E	12	9	15		36
MT				30	30
Language			3		
Total	30	30	33	30	123