

SUSTAINABLE ENERGY ORIENTATION IN THE PROCESS, ENVIRONMENTAL ENGINEERING & BEE MASTER'S DEGREE PROGRAMMES

STUDY YEARS 2011-2012 & 2012-2013

DPEE/BEE SUSTAINABLE ENERGY: BASIC MODULE (* = COMPULSORY TO ALL) IN OULU

Code	Course name	ECTS	Period	Year	IV/P1	IV/P2	IV/P3	IV/P4	IV/P5	IV/P6	S	V/P1	V/P2	V/P3	V/P4	V/P5	V/P6
488400A	Orientation to the BEE studies (Only BEE/SE)	1,0	1	IV	x												
488401A	Introduction to the Environmental and Socio-economical Issues of the Barents Region*	2,0	1-2	IV	x	x											
488402A	Sustainable Development*	3,0	3	IV			x										
488012A	Environmental Legislation (Only PO/SE & BEE / SE; 2011-12 on P4-P5)	5,0	(2-3)	IV				x	x								
488404A	Global Change*	5,0	1-2	IV	x	x											
477321S	Research ethics*	3,0	4	IV				x									
488202S	Production and Use of Energy*	3,0	1	IV	x												
488204S	Air Pollution Control Engineering*	5,0	3	IV						x							
488203S	Industrial Ecology*	5,0	2	IV		x											

Total ECTS (BEE/SE) 32,0
 Total ECTS (PO/SE) 31,0
 Total ECTS (YMP/SE) 26,0

DPEE/BEE SUSTAINABLE ENERGY: ADVANCED MODULE (COMPULSORY* or ELECTIVE COURSES) IN OULU

Code	Course name	ECTS	Period	Year	IV/P1	IV/P2	IV/P3	IV/P4	IV/P5	IV/P6	S	V/P1	V/P2	V/P3	V/P4	V/P5	V/P6
488405S	Environmental issues in the Barents region*	5,0	6	IV						x							
488410A	Introduction to sustainable energy*	10,0	4-6	IV				x	x	x							
488002S	Advanced practical training*	3,0	summer	IV							x						
477041S	Experimental design	5,0	4-5	IV				x	x								
477309S	Process and environmental catalysis	5,0	2	IV		x											
477311S	Advanced separation processes (2012, 2014)	5,0	5	IV					x								
488104A	Industrial and communal waste management	5,0	6	IV						x							
488205S	Environmental load of process industry	4,0	6	IV						x							

Total of compulsory ECTS in Module (all) 18,0
 Minimally needed elective ECTS (BEE/SE) / Module in total 10,0 28,0
 Minimally needed elective ECTS (PO/SE) / Module in total 11,0 29,0
 Minimally needed elective ECTS (YMP/SE) / Module in total 16,0 34,0

DPEE/BEE SUSTAINABLE ENERGY: SUPPLEMENTARY MODULE IN NORWAY (NARVIK UNIVERSITY COLLEGE. PLEASE NOTE: SEMESTER BEGINS ON MID AUGUST!)

Code	Course name	ECTS	Period	Year	IV/P1	IV/P2	IV/P3	IV/P4	IV/P5	IV/P6	S	V/P1	V/P2	V/P3	V/P4	V/P5	V/P6
488420S	Solar and wind energy	10,0	1-3	V								x	x	x			
488421S	Bio-energy	5,0	1-3	V								x	x	x			
488422S	Energy systems in buildings and industry	5,0	1-3	V								x	x	x			
488423S	Project work (Pre-master work)	10,0	1-3	V								x	x	x			

Total of compulsory ECTS in Module (all) 30,0

DPEE/BEE SUSTAINABLE ENERGY: MASTER'S THESIS (IN NARVIK OR OULU)

Code	Course name	ECTS	Period	Year	IV/P1	IV/P2	IV/P3	IV/P4	IV/P5	IV/P6	S	V/P1	V/P2	V/P3	V/P4	V/P5	V/P6
	Master's Thesis	30,0	4-6	V											x	x	x

Total of compulsory ECTS in Module (all) 30,0

All studies in total BEE/SE (ECTS)	120,0
All studies in total PO/SE (ECTS)	120,0
All studies in total YMP/SE (ECTS)	120,0