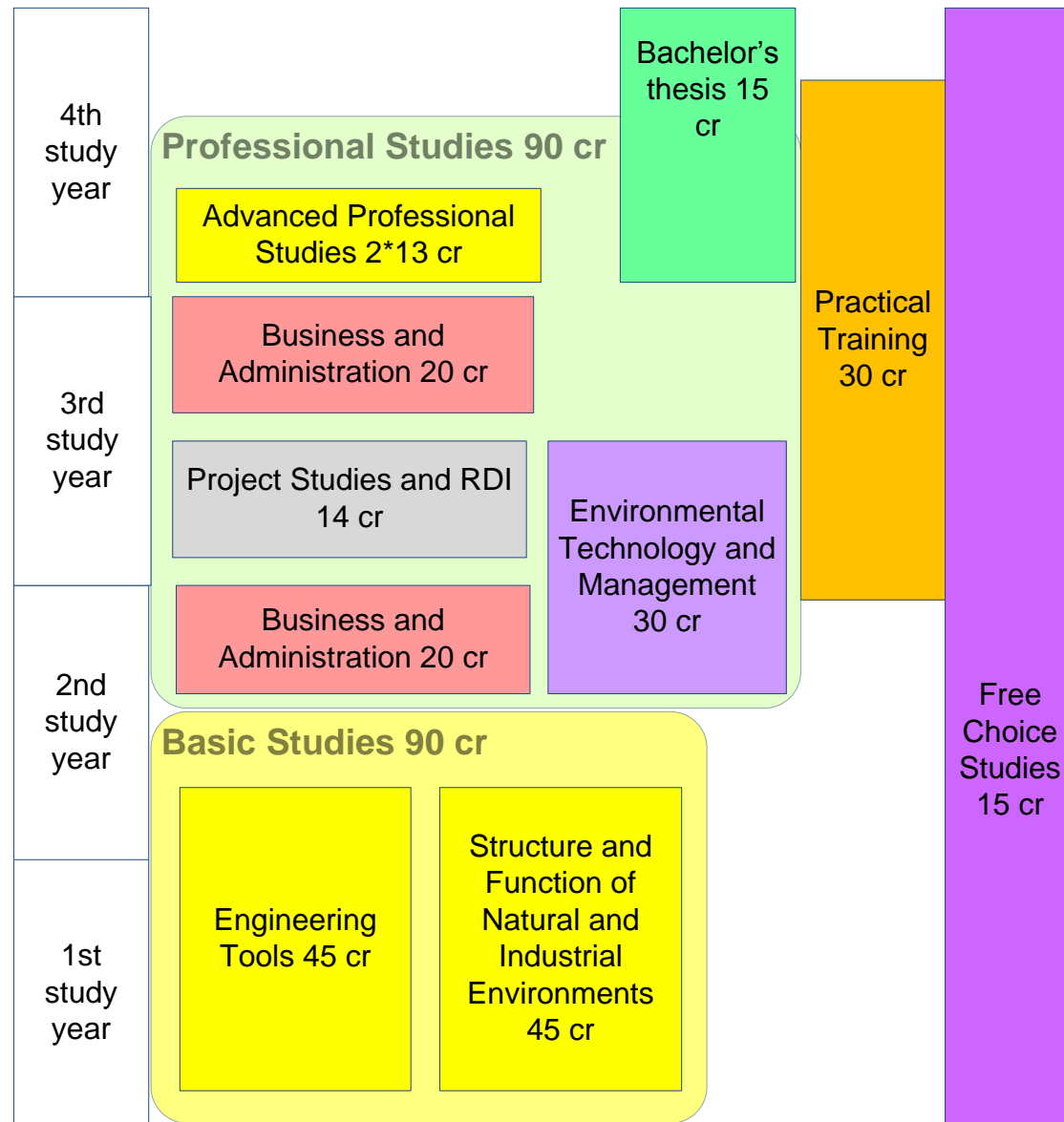


D.P. in Energy and Environmental Engineering



14IDEE Curriculum

1. period

2. period

3. period

4. period

Year
1,
2014
-
2015

15 cr Engineering Tools 1

Geometry and Vector
Algebra
3 cr

Functions and Matrices
3 cr

Writing Scientific Reports in English
3 cr

Computer and
Software Tools
3 cr

Tekniikan suomen kieli
ja viestintä/Finnish for
Foreigners 1
3 cr

Basic
Environmental
Monitoring

Use of
Engineering
Tools

15 cr Structure and Industrial Environments 1

Function of Natural and

Basic Chemistry
5 cr

Mechanics
3 cr

Fluid Mechanics and
Thermophysics
3 cr

Soil Science and Engineering
4 cr

Free Choice Studies:
Orientation for Engineering
Mathematics, 3 cr

15 cr Engineering Tools 2

Differential Calculus
3 cr

Integral Calculus
3 cr

Tekniikan suomen kieli ja raportointi/Finnish for
Foreigners 2
3 cr

Basics of Environmental Technology and Management
6 cr

Basic
Environmental
Monitoring

Use of
Engineering
tools

15 cr Structure and Industrial Environments 2

Function of Natural and

Inorganic and Analytical Chemistry
5 cr

Electrodynamics and
Magnetism
3 cr

Oscillations, Waves and
Modern physics
3 cr

Structure and Function of Ecosystems
4 cr

Free Choice Studies: WEDC, 3 cr

Year
2,
2015
-
2016

1. period

2. period

Professional
software and
engineering tools
use

15 cr Engineering Tools 3

Statistics 3 cr

English for Students of Environmental Engineering
3 cr

Finnish for Foreigners 3/Svenska för teknikbranschen
4 cr

Professional Software
Tools 5 cr

1-2. periods

Industrial
Processes
and Impact
Monitoring

15 cr Structure and
Industrial Environments 3

Function of Natural and

Physics Laboratories
3 cr

Environmental Chemistry
6 cr

Sustainable Industrial Production
6 cr

Free Choice Studies

3. period

4. period

Environmental
Engineering and
Management

15 cr Environmental
Management 1

Waste Management
and Engineering
5 cr

Industrial Emissions
and Monitoring
4 cr

Technology and

Environmental
Management Tools
6 cr

3 - 4 periods

Environmental
administration
and legislation

10 cr Business and

Public Administration
3 cr

Administration 1

Industrial Economics
and Marketing
4 cr

Personnel Administration
and Work Life Skills (*OHS
card*)
3 cr

Free Choice Studies: GIS and Remote Sensing Tools (5 cr)

Year
3,
2016
-
2017

1. period

2. period

15 cr Environmental
Technology and Management 2

Ecotoxicology
4 cr

Risk Assessment and
Management, 3 cr

Water and Sanitation
5 cr

Material Efficiency and
Recycling 3 cr

Environmental
Monitoring,
Water treatment,
Environmental
risks

Work life
connections
and project
implementati
on

1-2. periods

Christmas

14 cr Project Studies and RDI

Project Management
Tools 3 cr

Scientific Methods
3 cr

Professional Communication
3 cr

Project 5 cr

Free Choice Studies

3. period

4. period

10 cr Business and

Administration 2

Infrastructure and
Community
Development 3 cr

Environmental
Legislation 4 cr

Environmental Ethics
3 cr

Environmental
Management
and leadership
skills

Work life skills
and advanced
professional
skills

3 - 4 periods

15 cr Practical Training

Coaching and Info for
Practical Training

Practical Training
15 cr

Free Choice Studies

Year
4,
2017
-
2018

1. period

2. period

Advanced
Environmental
Monitoring and
Water treatment,

13 cr Environmental
Technology and Management 3 (optional)

Contaminated Soils 4 cr: *env. sampling*

Advanced Water and Wastewater Engineering 5 cr:
WWT systems planning

Environmental Monitoring and Measurements 4 cr:
radiation safety officer

Energy
production,
renewable
energy and
energy
technologg

13 cr International Energy Technology and
Management (optional)

Renewable Energy 5 cr

Energy Efficiency 4 cr

Power Plant Technology 4 cr

Free Choice Studies

3. period

4. period

15 cr Bachelor's Thesis

Bachelor's thesis

3 - 4 periods

Work life skills
and advanced
professional
skills

15 cr Practical Training

Practical Training
15 cr

Free Choice Studies

1. period

2. period

13 cr Business and Entrepreneurship (optional)

Quality Management 5 cr

Entrepreneurship 8 cr (Y-Campus)

13 cr Logistics and Environment (optional)

Basics of Logistics 5 cr (IB)

Industrial Logistics Processes 5 cr (DP Mec. Eng)

Emergencies and Disasters Management 3 cr (IB)

Year
4,
2017
-
2018

1-2. periods

Christmas

