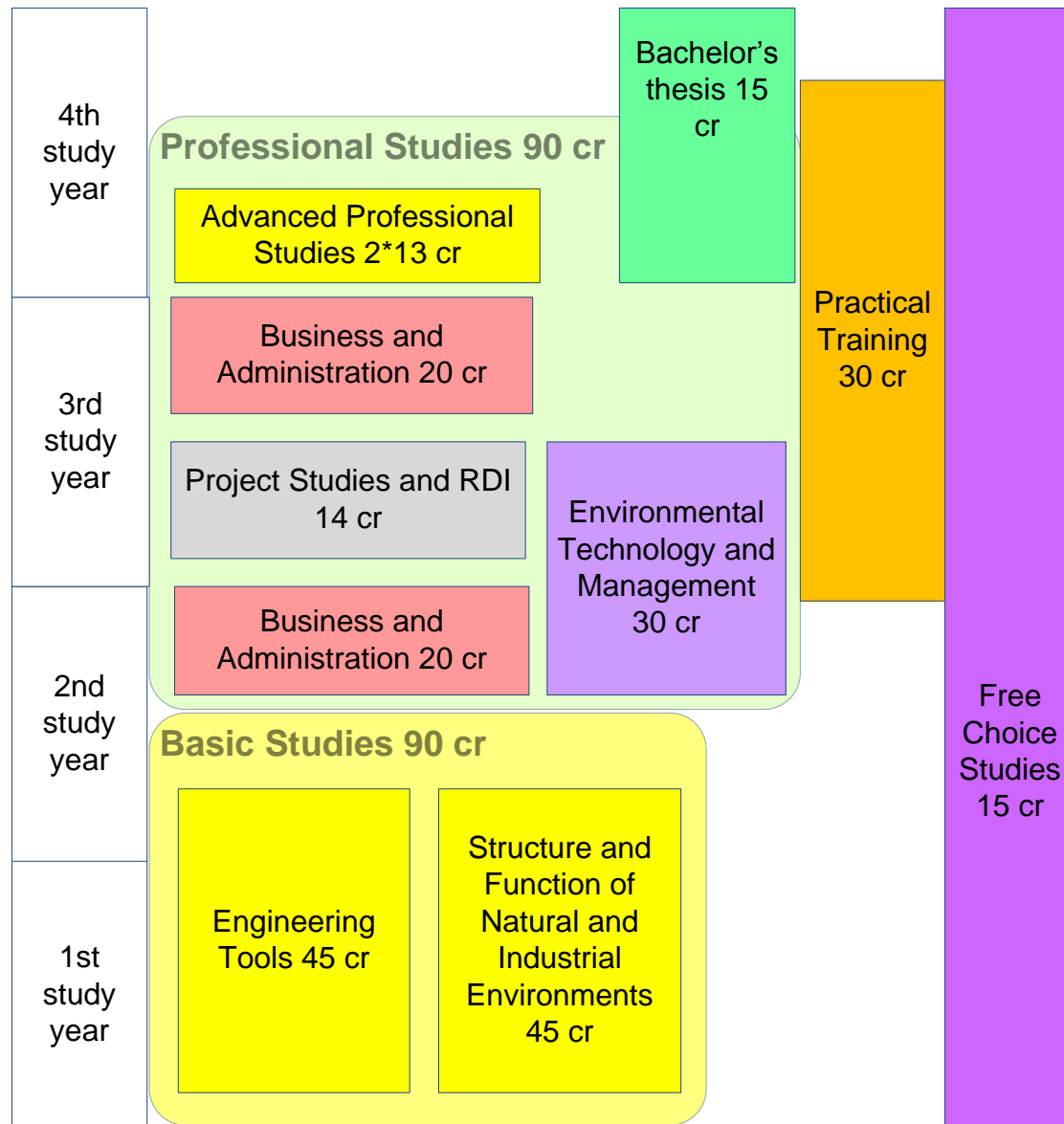


D.P. in Energy and Environmental Engineering



14IDEE Curriculum

1. period

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

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

2. period

Use of
Engineering
Tools

Basic
Environmental
Monitoring

1-2. periods

Christmas

3. period

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

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

4. periodi

Use of
Engineering
tools

Basic
Environmental
Monitoring

3-4 periods

Year
1,
2014
-
2015

Year
2,
2015
-
2016

1. period

2. period

3. period

4. period

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

Professional software and engineering tools use

Industrial Processes and Impact Monitoring

Christmas

15 cr Environmental Management 1

Waste Management and Engineering 5 cr

Industrial Emissions and Monitoring 4 cr

Technology and Administration 1

Environmental Management Tools 6 cr

3 - 4 periods

Environmental Engineering and Management

Environmental administration and legislation

15 cr Structure and Function of Natural and Industrial Environments 3

Physics Laboratories 3 cr

Environmental Chemistry 6 cr

Sustainable Industrial Production 6 cr

10 cr Business and Administration 1

Public Administration 3 cr

Industrial Economics and Marketing 4 cr

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

Free Choice Studies

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

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

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

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

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*

Advanced Environmental Monitoring and Water treatment,

Energy production, renewable energy and energy technollogg

2. periods

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

Work life skills and advanced professional skills

3 - 4 periods

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

