

**Institute for
Environmental Science and Management,
University of Latvia -**

**Environmental study programmes and
research**

Institute for Environmental Science and Management, University of Latvia – IESAM UL

IESAM UL was established in 2000, on the basis of the Centre for Environmental Science and Management (CESAM).

CESAM was created in 1993 in the framework of EU TEMPUS PHARE Programme project in order to promote development of interdisciplinary environmental education and environmental research programmes.

IESAM UL has main functional directions:

environmental science and management studies - development of academic and professional training programmes;

research in environmental policy, planning and management;

Institute for Environmental Science and Management, University of Latvia

- Institute has experience in **international co-operation** with Universities in the Nordic countries and further in Europe as well as running national and international projects like TEMPUS, LIFE, Phare, Nordic Council of Ministers, Swedish Institute etc.
- **UNESCO Chair in Sustainable Coastal Development** is an academic division established in 2002.
(Agreement between the UNESCO and University of Latvia)
Aims at development of methodologies and introduction of sustainable coastal development issues into studies, research, pilot and demo projects as well as networking.

Study programmes

MSc study programmes:

- **„Environmental management”** (from 1993)
academic study programme:
MSc diploma in Environmental Science
- **„Environmental resource management”** (from 2005)
professional study programme:

MSc diploma in Environmental Management and Certificate on profession „Water and waste management specialist”
(according the requirements from Professional qualification
- Water and waste management specialist)

Study programmes

Institute for Environmental Science and Management, which belongs to the Faculty of Economics and Management – the only institution at the University of Latvia, which provides **Master level studies on Environmental Management.**

The BSc level programme on Environmental Management is in preparation stage.

BSc and MSc programmes on Environmental Science are performed at the Faculty of Geography and Earth sciences.

BSc and MSc programmes on Ecology are performed at the Faculty of Biology.

Study programmes

Master level programmes on Environmental management aims to educate **academic and applied oriented** Environmental management specialists, who are able to manage environmental problems using **interdisciplinary approach**.

Study programmes are focused to complex character of Environmental management and Environmental science development trends, providing interdisciplinary knowledge and skills.

Study programmes

The content and its implementation forms of Master level study programmes reflects the main strategic directions by the Institute for Environmental Science and Management - both **theoretical and practical development of environmental science and management.**

The academic qualification and professional experience of institute's **teaching staff with multidisciplinary backgrounds** gives contribution to substantial elaboration and didactic optimization of the lectured courses, which are defined by the rapid development both of Latvian and EU environmental management processes.

Academic staff of IESAM UL :

Prof., Dr. paed. Raimonds Ernšteins – director of IESAM UL

- Environmental policy and management systems
- Coastal sustainable development and Environmental management at municipalities
- Environmental communication
- Environmental pedagogy

Asoc.prof., Dr.biol. Roberts Jūrmalietis

- Environmental health and Environmental psychology
- Ecology and Biodiversity protection
- Environmental Science

Academic staff of IESAM UL

Asoc.prof., Dr. ing. Ivars Kudrenickis

- Environmental planning
- Energy resource management
- Air and climate protection
- Interactive methods for Environmental studies

Docent, Dr. chem. Juris Benders

- Nature resource management
- Corporate Environmental management
- Water resource management
- Environmental Impact Assessment

Docent, Dr. phys. Rūta Bendere

- Waste management
- Waste resources as energy production source

Courses

Optional courses for Faculties of University of Latvia (2 cr.):

- Introduction to Environmental Science
- Environmental Management and Policy Principles
- Environmental Education and Public Awareness
- Environment and Technology

The main realised projects

during last 4 years

Environmental Management and Sustainable Development at municipalities

Aims to **develop capacity building for employees and decision makers in Latvian municipalities**

In partnership with Institute for Environment and Sustainability Communication (University of Lueneburg), Union of Local and Regional Governments of Latvia.

One year **distance learning study programme** and development of teaching resources for 12 modules with participation of 122 participants (four groups).
Graduates received certificate.

(2004 – 2006)

Evaluation Model for the Sustainable Development of European Coastal zones

Project Interreg IIIC – South

DEDUCE

Aims to improve tools and information systems necessary for optimum decision making about the coastal zones.

Based on calculation, validation and analysis of 28 environmental and socioeconomic indicators for measuring the degree of sustainable development of the European coastal zones.

(2005 – 2007)

<http://www.gencat.net/mediamb/sosten/deduce/deduce.htm>

Coastal sustainability as a Challenge –

Interreg III B Neighbourhood programme project

COASTSUST

The Project aims to develop sustainable development for protected areas in the Baltic Sea region providing cooperation between protected area institutions.

Results:

elaboration and testing management models for protected areas and communication among local target groups.

That leads to more comprehensive integration of protected areas into local municipalities.

The project is developing the educating and informative role of protected areas.

(2005 – 2007)

<http://www.coastsust.net>

**A multimedia distance training package in
Integrated coastal zone management –
*Leonardo da Vinci programme***

COASTLEARN

Project aims to develop the **distance training Programme on Integrated coastal zone management (ICZM)** for Central and Eastern Europe countries.

The project intends to apply training methodology and to adapt it to the needs of countries.

A multimedia distance training package in Integrated coastal zone management – *Leonardo da Vinci programme*

The distance training programme has the modular structure and includes modules on:

- Policy analysis
- Geographic information systems (GIS)
- Environmental planning
- Environmental risk assessment
- Biodiversity management
- Public participation
- Sustainable tourism development

Project results are available at
<http://www.coastlearn.org> and CD

College Programme in Municipal Environmental Management for Regional Development –

Leonardo da Vinci programme

Main objectives:

to elaborate comprehensive **modular programme**, which provides theoretical and applied knowledge integrating environmental competence and **municipal management principles** and

- could be implemented on the college level, as well as,
- could be used as separate modules available for short term training courses at municipalities;

(2003-2004)

College Programme in Municipal Environmental Management for Regional Development –

Leonardo da Vinci programme

The following Manuals were elaborated and published:

1. Nature resource management in municipalities
2. Waste management
3. Environmental communication
4. Local Agenda 21

Institute for Environmental Science and Management

5. Sustainable building and planning
6. Ecotechnics and product development

Mid-Sweden University

College Programme in Municipal Environmental Management for Regional Development –

Leonardo da Vinci programme

7. Municipal environmental governance

8. Municipal project management

Roskilde University, Denmark

9. Resource development for municipalities

10. Information technologies in municipalities

WEGRE, Greece

11. Pollution prevention management and environmental technologies

12. Environmental management systems and audit at municipalities

CTC, Ireland

Docent, Dr. chem. Juris Benders
profile and specializations

Study courses:

Nature resource management

Environmental management systems

Water resource management

Environmental Impact Assessment

Environmental applied research

Environmental analysis methods

Docent, Dr. chem. Juris Benders ***profile and specializations***

Study director for MSc study programme
„Environmental resource management”;

Research activities – participation in various above mentioned
EU projects;

Consultation experience:

Introduction of Environmental management system according
ISO 14001 into:

- Latvenergo (National electroenergy company);
- Siemens Latvia Ltd.