



Univerza v Novem mestu
*Fakulteta za poslovne
in upravne vede*

**CLEAN COPY OF THE ACCREDITED
STUDY PROGRAMME
2nd CYCLE**

ENVIRONMENTAL MANAGEMENT

(master's study programme)

Novo mesto, March 2021

TABLE OF CONTENTS

1	GENERAL INFORMATION ABOUT THE PROGRAMME	2
2	FUNDAMENTAL OBJECTIVES AND COMPETENCES	2
2.1	Fundamental objectives of the study programme	2
2.2	General competences	3
2.3	Course-specific competences.....	3
3	INTERNATIONAL COOPERATION OF THE INSTITUTION	4
4	CURRICULUM WITH ECTS (CREDIT POINTS) VALUES OF INDIVIDUAL STUDY OBLIGATIONS	4
4.1	Number of learning units with ECTS.....	5
4.1	Learning units and their inclusion in the programme structure	8
4.2	The ratio of lectures, seminars, tutorials and other organised forms of study	9
4.3	Practical training within the programme, implementation and ECTS	11
5	ACCESS REQUIREMENTS AND CRITERIA FOR THE SELECTION OF CANDIDATES IN THE EVENT OF ENROLMENT RESTRICTIONS	11
6	CRITERIA FOR RECOGNITION OF SKILLS AND COMPETENCES GAINED BEFORE ENROLMENT	12
7	ASSESSMENT METHODS	12
8	PROGRESSION REQUIREMENTS FOR THE PROGRAMME	14
9	PROVISIONS ON TRANSFERS BETWEEN STUDY PROGRAMMES	14
10	MODES OF STUDY	14
11	REQUIREMENTS FOR COMPLETION OF THE STUDY	15
12	PROFESSIONAL TITLE	15

1 GENERAL INFORMATION ABOUT THE PROGRAMME

Study Programme:	Environmental Management
Cycle:	second
Type:	master's study programme
Duration:	2 years
ECTS amount:	120 ECTS
Klasius P-16:	0521 – Environmental sciences
Research area (Frascati classification):	natural sciences
SOK (Slovene classification framework)	level 8
EOK (European classification framework)	level 7
EOVK (European higher education classification framework)	second cycle
Accreditation:	Council for Higher Education of the Republic of Slovenia, decision No. 6033-135/2020/9 on 1 March 2021.

2 FUNDAMENTAL OBJECTIVES AND COMPETENCES

2.1 Fundamental objectives of the study programme

The fundamental objectives of the study programme are to educate and qualify second-cycle students for employment in different specific environmental management positions in different economic sectors and administration at the local, national and international level, for example:

- Environmental infrastructure managers;
- Environmental consultants in industrial companies;
- Environmental consultants in companies with bigger environmental impacts;
- Consultants in environmental aspects of renewable resources (for investors in different economic and public administration sectors);
- Consultants in decisions on environmental investments/subventions;
- Consultants in economy to reduce health risk due to environmental impact;
- Environmental consultants in protected natural environments;
- Environmental, health and energy management leaders in companies;
- Collaborative work as members of project groups working to solve complex environmental problems relating to research, natural sciences, technology, ecology, law, innovation and economy;
- Consultants in regional, bilateral and international projects;

- Candidates for continuation of study in third-cycle programmes – doctoral study programmes (PhD).

To be able to perform work in these positions, second-cycle graduates need to gain solid knowledge of the broader professional field in home and international environment, as well as the competence to analytically assess the actual situation in the environment, keep up with the changes, be acquainted with the methods and measures to prevent and mitigate impacts due to changed circumstances, and be skilled in using and defining the most appropriate research methods to solve complex environmental protection and sustainable development problems.

2.2 General competences

Students of the study programme will develop the following general competences:

- Knowledge and understanding of environmental processes, and the ability to analyse, synthesise and anticipate solutions and consequences;
- Integrated critical thinking, ability to analyse, synthesise and anticipate solutions for environmental problems in the areas of natural, technical, ecological, administrative, innovative and economic sciences, as well as other social sciences (interdisciplinarity);
- Knowledge and use of research methods, procedures, processes and technology to solve environmental problems and implement modern environmental research methodologies in various business systems;
- Ability to use knowledge creatively;
- Qualification for recognizing the need for change and implementing innovations in the environment;
- Autonomy and responsibility in preparing solutions, addressing suggestions and decision-making;
- Commitment to professional ethics;
- Qualification for presenting the acquired knowledge and research findings;

Qualification for furthering, complementing and updating the knowledge.

2.3 Course-specific competences

Students of the study programme will develop the following course-specific competences:

- Analysis of natural and technical, information and communication systems, legal, innovative, economic and business aspects of environmental protection and sustainable development, environmental monitoring, health ecology, environmental ethics, spatial planning, renewable energy resources and environmental innovations;
- Use of selected tools of environmental research methodology to solve environmental problems, and their use in interdisciplinary connections;
- Integrated mastering of the basic knowledge of sustainable development;
- Use of environmental pollution methods and monitoring;
- Connecting aspects of spatial planning with sustainable development;
- Interpretation of all types of renewable energy resources and their environmental aspects;

- Evaluation of environmental innovations, ability to apply new findings, information and interpretation in the context of environmental management;
- Interpretation of legal and administrative bases, and environmental consents and permits, and development of skills and abilities in a specific professional field;
- Ability to use environmental technologies and systems in environmental management;
- Awareness of vital importance of water protection;
- Use of information and communication technologies and systems as information sources and as communication, research and work tools;
- In-depth knowledge and understanding of organizations and processes in a modern business environment;
- Qualification for strategic operation, management and development of the most complex work systems based on modern organizational and economic principles;
- Ability to make responsible professional decisions;
- Understanding of values and value systems as well as professional and ethical principles.

3 INTERNATIONAL COOPERATION OF THE INSTITUTION

In 2011, the Erasmus University Charter (ECHE) was implemented for the first time, with which the Faculty gained the right to international exchanges of higher education teachers, students and to participate in European projects.

The Faculty develops its international activity in four areas:

- organisation of international scientific conferences,
- exchange of students and higher education teachers/staff,
- participation in international research projects, and
- individual contacts of pedagogical staff, researchers and associates.

4 CURRICULUM WITH ECTS (CREDIT POINTS) VALUES OF INDIVIDUAL STUDY OBLIGATIONS

The study programme is designed in accordance with the provisions of the Higher Education Act and in accordance with the criteria for accreditation of study programmes. It is evaluated according to Criteria for Credit Assignment to Study Programmes According to ECTS.

In the master's study programme *Environmental Management* 27.7% of the total annual student workload is spent on organised study work. The main student workload is based on individual student work, which is in accordance with the set objectives as well as with the general and course-specific competences.

4.1 Number of learning units with ECTS

The following table shows the list of course unit names and the number of hours by individual semester and year, number of hours of organised study work, number of hours of individual student work, annual student workload and credit evaluation according to ETCS.

Table 1: Curriculum with ECTS (credit points) values of individual study obligations

YEAR 1									
Year	No.	Learning unit	L	T	FW	OSW	ISW	ASW	ECTS
1	1.	Sustainable Development	45	30		75	125	200	8
1	2.	Ecology and Biotic Diversity	45	15	15	75	125	200	8
1	3.	Environmental Monitoring	45	15	15	75	125	200	8
1	4.	Environmental Ethics	30	15		45	105	150	6
		TOTAL SEMESTER 1	165	75	30	270	480	750	30
1	5.	Environmental Research Methodology	45	30		75	125	200	8
1	6.	Spatial Planning and the Environment	30	15	15	60	115	175	7
1	7.	Environmental Organizational Management	45	30		75	125	200	8
1	8.	Decision-making Models	30	30		60	115	175	7
		TOTAL SEMESTER 2	150	105	15	270	480	750	30
		TOTAL YEAR 1	315	180	45	540	960	1500	60

Legend: L= lectures, T = tutorials, FW = field work, OSW = organised study work, ISW = individual student work, ASW = annual student workload, ECTS = European Credit Transfer System points.

YEAR 2									
Year	No.	Learning unit	L	T	FW	OSW	ISW	ASW	ECTS
2	1.	Renewable Energy Sources	30	15		45	105	150	6
2	2.	Environmental Innovations	30	15		45	105	150	6
2	3.	Environmental Technologies	30	15		45	105	150	6
2	4.	Environmental Consents and Permits	30	15		45	105	150	6
2	5.	Elective course I	30	15		45	105	150	6
		TOTAL SEMESTER 3	150	75		225	525	750	30
2	6.	Elective course II	30	15		45	105	150	6
2	7.	Master's Seminar	5	15		20	80	100	4
2	8.	Master's Thesis					500	500	20
		TOTAL SEMESTER 4	35	30		65	685	750	30
		TOTAL YEAR 2	185	105		290	1210	1500	60

Legend: L= lectures, T = tutorials, FW = field work, OSW = organised study work, ISW = individual student work, ASW = annual student workload, ECTS = European Credit Transfer System points.

Commitment overview	L	T	FW	OSW	ISW	ASW	ECTS
Year 1	315	180	45	540	960	1500	60
Year 2	185	105		290	1210	1500	60
TOTAL	500	285	45	830	2170	3000	120

The study programme lasts two years, i.e. four semesters. It comprises 3000 hours amounting to 120 ECTS and includes organised study work as well as individual student work. It consists of the joint and elective part. The joint part of the programme is implemented in the first year, comprises 8 courses (60 ECTS) and is compulsory for all students.

The elective part of the programme is implemented in the second year and comprises two elective courses (12 ECTS).

An important part of the programme is intended for development of competences in the field of research activity. It comprises 1 compulsory course (8 ECTS), project papers in the work environment or fundamental, applicative, development research papers at all study courses, Master's Seminar (4 ECTS) and Master's thesis (20 ECTS).

Elective courses

In the second year the elective courses enable students to exercise their own study programme in accordance with individual needs. They choose two elective courses (12 ECTS), which they can take at their home faculty or at any second cycle study programme in Slovenia or abroad, at the institution with which the faculty has an agreement.

The elective courses are implemented in such scope as the number of groups at tutorials would be if only one elective course was implemented.

Table 2: Elective courses

No.	Learning unit	L	T	OSW	ISW	ASW	ECTS
1.	Environmental Rehabilitation and Renovation	30	15	45	105	150	6
2.	Health Ecology	30	15	45	105	150	6
3.	Energy Systems	30	15	45	105	150	6
4.	Strategic Management	30	15	45	105	150	6
5.	Environmental Economics and Accounting	30	15	45	105	150	6
6.	Information and Communication Systems	30	15	45	105	150	6
7.	Anthropology of Social Movements	30	15	45	105	150	6

Legend: L= lectures, T = tutorials, OSW = organised study work, ISW = individual student work, ASW = annual student workload, ECTS = European Credit Transfer System points.

4.1 Learning units and their inclusion in the programme structure

The study programme lasts two years, i.e. four semesters. The first year consists of 8 joint study courses. The second year consists of: 4 joint study courses (24 ECTS), two elective courses (12 ECTS), Master's Seminar (4 ECTS) and Master's Thesis (20 ECTS). The study programme comprises a total of 14 courses (96 ECTS), Master's Seminar (4 ECTS) and Master's Thesis (20 ECTS).

Table 3: Structure of the programme according to the content areas, obligation and number of ECTS

Year	Structure of the programme	Units No.	TOTAL IN ECTS	TOTAL IN %
1.	Obligatory section	8	60	50,0
2.	Obligatory section	4	24	20,0
	Elective course	2	12	10,0
	Master's Seminar	1	4	3,3
	Master's thesis	1	20	16,7
SKUPAJ:		16	120	100,0
SKUPAJ V %:			100,0	

Core learning units, such as Sustainable Development, Ecology and Biotic Diversity, Environmental Monitoring, Environmental Ethics, Environmental Research Methodology, Spatial Planning and the Environment, Environmental Organizational Management and Decision-making Models, provide the basic knowledge from the field of environmental sciences. The content of the core learning units represents 60 ECTS or 50% of the study programme. Technical learning units provide core professional knowledge of renewable energy resources, environmental innovations and technology, and environmental consents and permits. The content of these learning units represents 24 ECTS or 20% of the study programme. Elective courses in the second year of study allow students to, based on their own interests, upgrade and further enhance their knowledge in specific areas. Elective courses can be selected from the list of courses defined by the faculty, including courses organised by other faculties across Slovenia with which the faculty has concluded an agreement and courses from comparable study programmes across Europe available through a mobility programme.

4.2 The ratio of lectures, seminars, tutorials and other organised forms of study

The programme comprises 3000 hours (120 ECTS), 1500 hours (60 ECTS) in each year. Organised study work includes 27.7 %, 16.7 % of which are lectures and 11.0 % are tutorials. Individual student work represents 72.3 % of the programme.

Table 4: The ratio of lectures, seminars, tutorials and other organised forms of study

Year	OSW		OSW	ISW	ASW	in ECTS
	L	T				
1.	315	225	540	960	1500	60
2.	185	105	290	1210	1500	60
TOTAL in hours	500	330	830	2170	3000	120
TOTAL IN %	16.7	11.0	27.7	72.3	100.00	

Forms of study work are: lectures, tutorials, field work and individual student work (preparations for the exams, studying professional literature and preparation, writing, presentation and defence of the project papers in the work environment, and fundamental, applicative or research papers).

Organised study work

Lectures are an organised form of study work implemented with a collective group of students. The lecturer transfers the basic knowledge and the most recent findings from their field of expertise to students, and encourages them to participate actively and reflect critically by using modern learning and teaching methods supported by ICT.

Seminar tutorials are an organised form of study work conducted with a group of 30 students. Students solve actual real-life problems by applying the knowledge and processes they have learned in lectures and independent individual study work. According to the study plan of each learning unit, they individually write, present and orally defend a project assignment in the work environment or a basic, applied or developmental research assignment.

Fieldwork is done to supplement the study process and is obligatory. Through fieldwork, students acquire practical skills that upgrade the theoretical content of the lectures. With the help of their professors and assistants, as well as local guides, they familiarise themselves with local features and perform practical tasks in the natural environment.

Individual research work of students

Project assignment in the work environment or basic, applied or developmental research assignment is the student's independent study work (ISW) conducted under the guidance of a mentor. It addresses a real-life professional problem from the business environment and provides a possible solution. With this work, students demonstrate their ability to seriously consider and research a practical professional problem, to use ICT as a source of information and to master selected methodological tools for problem solving.

Before defending the master's thesis, students are required to present one of their successfully written and defended papers:

- at a scientific panel, congress, conference or symposium, and to publish it in a journal or
- a professional magazine recognised by the faculty.

Master's seminar is an organised form of study work in which students review their applied knowledge of research methods, familiarise themselves with proper instructions for writing and defending the master's thesis, and prepare a draft proposal. They are required to attend at least three master's thesis defences within ISW.

Master's thesis is an independent professional work written under the guidance of a mentor. It must include theoretical premises and their verification through independent research of current problems in the field of environmental sciences. In addressing their chosen topic, students are required to present the results of their research systematically and using the appropriate research instruments. They are required to demonstrate their ability to elaborate in writing and solve current practical problems in economy, companies, services, activities, institutions or a specific problem.

Prerequisite for registration of the topic of the master's thesis are completed study obligations in the scope of 90 ECTS.

The procedure, preparation and defence of the master's thesis is defined in special Rules.

4.3 Practical training within the programme, implementation and ECTS

The Master's degree study programme *Environmental Management* does not contain practical training of students.

5 ACCESS REQUIREMENTS AND CRITERIA FOR THE SELECTION OF CANDIDATES IN THE EVENT OF ENROLMENT RESTRICTIONS

Access requirements for the first year:

Enrolment requirements for the first year according to Article 38a of the Higher Education Act are:

- Higher education vocational study programme, implemented before 11 June 2004, in the relevant fields of study: natural sciences, technical and technological sciences, and environmental protection;
- Completed first-cycle study programme with at least 180 ECTS in the relevant fields of study: natural sciences, technical and technological sciences, and environmental protection;
- Equivalent study programmes in other fields of study, where candidates are required to complete the study obligations that are essential for the continuation of study before the enrolment. These obligations are determined based on the difference in the programmes and comprise from 10 to maximum 60 ECTS.

Access requirements for the second year:

Enrolment requirements for the second year are:

- University study programme, implemented before 11 June 2004, in the relevant fields of study: natural sciences, technical and technological sciences, and environmental protection;
- Completed first-cycle study programme with at least 240 ECTS in the relevant fields of study: natural sciences, technical and technological sciences, and environmental protection;
- Equivalent study programmes in other fields of study, where candidates are required to complete the study obligations that are essential for the continuation of study before the enrolment. These obligations are determined based on the difference in the programmes and comprise from 10 to maximum 60 ECTS.

Candidates who have completed a first-cycle study programme (undergraduate study programme) abroad apply under the same enrolment requirements.

Criteria for the selection of candidates in the event of enrolment restriction

In the event of enrolment limits, candidates will be selected based on the grade of the first-cycle diploma (30%) and based on the average grade of the first-cycle study (70 %).

6 CRITERIA FOR RECOGNITION OF SKILLS AND COMPETENCES GAINED BEFORE ENROLMENT

Upon written application of the candidate, enclosed certificates and other documentation, the faculty will recognise the knowledge and training that corresponds in whole or in part to the general or course-specific competences of the study programme.

If the knowledge was acquired in the formal/informal forms of education, candidates prove this knowledge with certificates and other documents ("atypical certificates", portfolios, confirmations of completed parts of study programmes, courses, and other forms of education) that clearly indicate the content of these programmes and the scope of student work. Students enrolling in the second year according to the Criteria for Transfers between Study Programmes, must fulfil at least 60 ECTS in the study programme *Environmental Management*.

The student may get an individual exam, which they have previously accomplished, recognised if the exam corresponds to at least 60% in content and scope to the course of the new programme. In this case, the grade attained previously, and the number of ECTS allocated to, the course in the new programme will be credited.

If the candidate has acquired their previous knowledge through self-education or experiential learning, they can apply for verification and assessment of the knowledge at the Faculty

Individual documented requests by candidates for recognition of knowledge acquired before enrolment are handled by a special committee in accordance with the procedures and rules regarding the recognition of examinations, adopted by the Faculty Senate. The candidate must submit all evidence and documentation no later than June for the next academic year.

7 ASSESSMENT METHODS

The verification and assessment of students' knowledge is designed to provide students and higher education teachers with ongoing, high quality information about the progress and achievement of the set objectives / competences of the study programme. The study programme requires students to work regularly, therefore the assessment of knowledge is diagnostic, formative and summative. The verification and assessment process is carried out regularly during and after the completion of each course.

The methods of verification and assessment of knowledge are specified in the syllabus of each course and correspond to the review of the achievement of planned goals, expected student performance and the development of general and course-specific competences. To ensure diversity of learning and teaching methods as well as validity, reliability and objectivity, higher education teachers use different combinations of verification and assessment in each course. Verification and assessment include all taxonomic domains (cognitive, conative and psychomotor) and all taxonomic levels, and we are also interested in the quality of the structure and organisation of knowledge.

Planned methods of reviewing and assessing knowledge include: examinations, project assignments in the work environment or basic, applied or developmental research assignments, oral presentations, solving real-life problems, master's thesis.

These methods of reviewing and assessing knowledge are performed individually.

The obligations of the compulsory study courses are the same. They include: active participation in lectures and tutorials, successfully prepared project assignment in the work environment or basic, applied or developmental research assignment, including presentation and defence, and successfully completed exam.

The obligations of elective courses include 100% attendance and active participation in lectures and tutorials, and a completed project assignment in the work environment or basic, applied or developmental research assignment, including presentation and defence. If the requirement of 100% attendance is not met, the obligations of elective courses include a successfully prepared project task in the work environment or basic, applied or developmental research assignment, including presentation and defence, and a successfully completed exam.

Students must achieve at least 55% of the required points for a passing grade. The estimates given in the assessment scales are converted to the ECTS point system. The rules and procedures for verification and assessment of knowledge and recognition of ECTS points acquired in other study programmes at the same or another higher education institution are defined in a special document.

Table 5: Grading scale in line with the ECTS assessment scale

Grade		Grade according to ECTS Criteria		Grading criteria %	Description of knowledge
10	odlično	A	excellent	95 – 100 %	Outstanding performance with only minor errors
9	prav dobro	B	very good	85 – 94 %	Above-average standard but with some errors
8	prav dobro	C	good	71 – 84 %	Generally sound work with a number of notable errors
7	dobro	D	satisfactory	61 – 70 %	fair knowledge but with significant shortcomings
6	zadostno	E	sufficient	55 – 60 %	knowledge meets the minimum criteria
5 - 1	insufficient	F	fail	< 55	knowledge does not meet the minimum criteria
*	successful	P	pass	55 – 100 %	knowledge meets the minimum criteria
*	unsuccessful	F	fail	< 55	knowledge does not meet the minimum criteria

*the grades “successful” and “unsuccessful” are used for grading the knowledge and accomplished obligations in Master’s Seminar.

Students are familiarised with the elements of verification and the criteria for assessment at the beginning of the academic year/an individual learning unit and in writing by the syllabus.

8 PROGRESSION REQUIREMENTS FOR THE PROGRAMME

Students who have fulfilled the obligations of the first year to the extent of at least 45 ECTS may advance to the second year. A prerequisite for advancing to the second year are also study obligations at the study units:

- Sustainable Development,
- Environmental Monitoring,
- Environmental Organizational Management,
- Decision-making Models.

A student may enrol in the second year even if he/she has not achieved the required credit points in the cases and under the conditions determined by the Faculty Statute.

Students who have not fulfilled the study obligations required for advancement to the next year may repeat a year only once during their course of study or change the study programme only once, but the second year cannot be repeated.

According to Article 70 of the Higher Education Act, students may be granted extended student status for a maximum of one year if there are legitimate reasons.

Based on their achievement, students may complete their studies in a shorter period of time than stipulated by the study programme.

9 PROVISIONS ON TRANSFERS BETWEEN STUDY PROGRAMMES

According to the Criteria for transferring between study programmes (Official Gazette of the Republic of Slovenia No. 14/19), transfers are possible between study programmes of the same cycle, which ensure the acquisition of comparable competences or learning outcomes after completion of the study programme, if at least half of the obligations from the first study programme related to the compulsory courses of the second study programme can be recognised as European Credit Transfer and Accumulation System (ECTS) credit points according to the Criteria for the recognition of previous education.

The criteria for transferring between study programmes are:

- Meeting admission requirements of the study programme,
- Number of places available,
- Comparability of the competences or learning outcomes acquired by the student in the first study programme.

The decision on whether the criteria for transferring between study programmes are met and the determination of the differences between two study programmes shall be made by the competent commission.

10 MODES OF STUDY

The study programme is performed in full-time and part-time modes. Both modes are of equal value. In the case of part-time mode of study, one year is normally conducted in one academic year.

The study is performed according to the valid normative and study calendar.

Organised study work in *part-time study* is organised consecutively, one course at a time. Each course begins with lectures, followed by tutorials in groups and examinations. The same order is organised for all courses. Part-time students must complete all obligations foreseen for full-time study.

Online Study is not foreseen, except in exceptional cases where students' circumstances change during the course of their studies, in which case the faculty senate makes the decision. This applies only to individual learning units or their parts.

11 REQUIREMENTS FOR COMPLETION OF THE STUDY

The requirements for the completion of the study are: the fulfilment of all academic obligations defined in the programme in the amount of 120 ECTS.

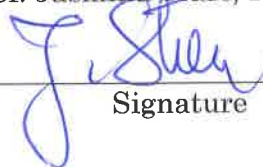
Students complete the studies if they achieve 180 credit points, as defined in the study programme. The requirement for completing the study in case of enrolment in accordance with the Criteria for Transfers between Study Programmes from a short-cycle study programme (adopted before 1 January 1994) to the Nursing Care programme (third year), are successfully completed study obligations of at least 60 ECTS.

12 PROFESSIONAL TITLE

Upon completion of the study, the student acquires a professional title in accordance with the Professional and Scientific Titles Act: *magister okoljskih ved* or *magistrica okoljskih ved*; abbreviated *mag. okolj. ved.*



Prof. Jasmina Starc, PhD, Dean


Signature