

**2017/2018**  
**Sustainable energy and environment**

**: SUSTAINABLE ENERGY and ENVIRONMENT**  
**Study program: SUSTAINABLE ENERGY and ENVIRONMENT**

The second cycle of university, academic studies at Sustainable energy and environment study program, is organized as a regular one-year (two-semester) study

There are four recognized modules at the second cycle of university studies

1. Module 4 - Knowledge of mathematics and computer science
2. Module 5 - Advanced levels of basic knowledge
3. Module 6 - Advanced levels of specific knowledge
4. Module 7 - Master thesis

Table - The structure of annual academic, university studies, second cycle, Sustainable energy and environment study program

No.	Course programs (subjects)	ECTS	Winter semester IX	Summer semester X
1.	4-1 Elective course from table 3	6	6	
2.	5-1 Elective course from table 4	6	6	
3.	5-2 Elective course from table 4	6	6	
4.	5-3 Elective course from table 4	6	6	
5.	Elective from University list	6	6	
6.	6-1 Elective course from table 5	6		6
7.	6-2 Elective course from table 5	6		6
	7 Master thesis	18		18
<b>Total credit per semester:</b>		<b>60</b>	<b>30</b>	<b>30</b>
<b>Total credit:</b>		<b>42 C S from courses + 18 C S from master thesis = 60 C S</b>		

Elective courses from faculty **module M4**, knowledge of mathematics and computer science, 3 course programs (subjects) –one course is elected.

Elective courses from faculty **module M5**, advanced levels of basic knowledge, 7 course programs (subjects) - three courses are elected.

Elective courses from faculty **module M6**, advanced levels of specific knowledge, 10 course programs (subjects) - two courses are elected.

The structure of the study program is providing a free course from the list of university courses proposed by each unit of the university, especially to meet the elective 10% under Article 99 of the Law on Higher Education from which students can choose only one course program.

Free list of university course programs are supplemented by all accredited courses from the second cycle (compulsory and elective) at the faculty of Mechanical Engineering in Skopje.

Elective courses from faculty **module M4**, knowledge of mathematics and computer science

No.	Winter semester IX semester (one course is elected)	ECTS credits	Professor
1.	M4 Selected topics in Applied Mathematics	6	Prof. dr. Aleksa Malcheski Ass. prof. dr. Bojan Prangoski
2.	M4 Selected topics in informatics	6	Prof. dr. Dushan Chakmakov Assoc. prof. dr. Emilija Celakoska
3.	M4 Probability and Statistics	6	Prof. dr. Nikola Tuneski Ass. Prof. d-r Mirko Petrushevski

Elective courses from faculty **module M5**, advanced levels of basic knowledge

No.	Winter semester IX semester (three course are elected)	ECTS credits	Professor
1.	M5 Modern thermal plants	6	Prof. dr. Done Tashevski
2.	M5 Advanced thermodynamics – selected chapters	6	Prof. dr. Risto Filkoski
3.	M5 Transport and the environment	6	Assoc. prof. dr. Dame Dimitrovski
4.	M5 Fluid mechanics in environmental engineering	6	Prof. dr. Valentino Stojkovski Prof. dr. Zoran Markov
5.	M5 Environmental measurement methods and monitoring systems	6	Prof. dr. Valentino Stojkovski Ass. prof. dr. Darko Babunski
6.	M5 Environmental systems analysis	6	Prof. dr. Atanasko Tuneski
7.	M5 An introduction to eco-innovations	6	Prof. dr. Atanas Kochov

University - Elective from University list

No.	Winter semester IX semester (one course is elected)	ECTS credits	Professor
1.	Elective from <b>University list</b> (all accredited courses from the second cycle at the faculty of Mechanical Engineering in Skopje)	6	

Elective courses from faculty **module M6**, advanced levels of specific knowledge

No.	Summer semester X semester (two course are elected)	ECTS credits	Professor
1.	M6 Non-conventional power plants	6	Ass. prof. dr. Igor Shesho
2.	M6 Water and waste water treatment	6	Prof. dr. Zoran Markov
3.	M6 Energy efficiency	6	Prof. dr. Done Tashevski
4.	M6 Eco-engines	6	Assoc. prof. dr. Dame Dimitrovski
5.	M6 Design of fluid conveying and hydro power system	6	Prof. dr. Valentino Stojkovski Prof. dr. Zoran Markov
6.	M6 Waste management	6	Assoc. prof. dr. Dame Dimitrovski
7.	M6 Energy vs. sustainable development: Concepts and aspects	6	Assoc. prof. dr. Ana Lazarevska
8.	M6 Automation of environmental processes	6	Ass. prof. dr. Emil Zaev Ass. prof. dr. Darko Babunski
9.	M6 Clean fossil and alternative fuels energy	6	Prof. dr. Risto Filkoski
10.	M6 Experts in teamwork	6	Prof. dr. Zoran Markov Assoc. prof. dr. Dame Dimitrovski Ass. prof. dr. Igor Shesho Assoc. prof. dr. Ana Frichand

Module M7, Master thesis

No.	Summer semester X semester	ECTS credits	Professor
1.	M7 Master thesis	18	