

R E P U B L I C O F M A C E D O N I A
Ss. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE



STUDY PROGRAMMES AT SECOND CYCLE
UNIVERSITY'S STUDIES
-two years study programmes-

FACULTY OF AGRICULTURAL SCIENCES AND FOOD - SKOPJE

РЕПУБЛИКА МАКЕДОНИЈА
УНИВЕРЗИТЕТ „Св. КИРИЛ И МЕТОДИЈ“ ВО СКОПЈЕ
ФАКУЛТЕТ ЗА ЗЕМЈОДЕЛСКИ НАУКИ И ХРАНА-СКОПЈЕ



REPUBLIC OF MACEDONIA
UNIVERSITY "Ss. CYRIL AND METHODIUS" IN SKOPJE
FACULTY OF AGRICULTURAL SCIENCES AND FOOD-SKOPJE

Skopje, 2012

STUDY PROGRAMME: PLANT BIOTECHNOLOGY

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	2	20.00
Elective courses from the Faculty list	7	70.00
Elective courses from the University list	1	10.00
Total	10	100.00

STUDY PROGRAMME: PLANT BIOTECHNOLOGY

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
- compulsory courses				
1.	Metodology for Research and Presentation of the Results	Prof. Dr. Petre Ivanoski Prof. Dr. Petar Hristov Prof. Dr. Marjan Kiprijanovski Prof. Dr. Gjorgji Martinovski	75	10
2.	Biometry	Prof. Dr. Sonja Ivanovska Prof. Dr. Dragan Gjosevski	75	10
-elective courses (the student can choose three courses from the list 1)				
3.			75	8
- elective courses (the student can choose one course from the University list of courses)				
4.			30	2
		Total in first semester	285	30

No.	Courses	Professor	No. of hours	ECTS
II CEMECTAP				
-elective courses (the student can choose three courses from the list 2)				
1.			75	10
2.			75	10
3.			75	10
		Total in second semester	225	30

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
-elective courses (the student can choose three courses from the list 2)				
1.			75	10
2.			75	10
3.			75	10
		Total in third semester	225	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
	MASTER THESIS			30
		Total in fourth semester		30
		Total:		120

LIST 1. (Elective courses)

Courses	Teacher	No. of hours	ECTS
Plant Genetics ⁵	Prof. Dr. Cane Stojkovski	75	8
Vegetable Production ²	Prof. Dr. Gordana Popsimonova	75	8
Grain Cereal Crops ^{1,6}	Prof. Dr. Goce Vasilevski	75	8
Applied Biotechnology in Viticulture ^{4,7,8}	Prof. Dr. Petar Hristov	75	8
Applied Biotechnology in Fruit Production ³	Prof. Dr. Marjan Kiprijanovski	75	8
Plants for Production of Forage ^{1,6}	Prof. Dr. Tatjana Prentovikj	75	8
Flower Crop Production ²	Prof. Dr. Stefanka Hadji Pecova	75	8
Tissue Culture ⁵	Prof. Dr. Sonja Ivanovska	75	8
Tobacco and Tobacco Seed Production ^{1,5}	Prof. Dr. Zlatko Arsov	75	8

LIST 2. (Elective courses)

ПРЕДМЕТ	НАСТАВНИК	ФОНД НА ЧАСОВИ	ЕКТС
Agro-ecology ¹	Ass. Dr. Zvonko Pacanoski	75	10
Analytical Sensory Properties of Alcoholic Beverages ⁸	Prof. Dr. Zvonimir Bozinovich	75	10
Soilless Cultivation ²	Prof. Dr. Gordana Popsimonova	75	10
Biological Plant Protection ^{1,2}	Prof. Dr. Slobodan Bandjo	75	10
Biochemistry of Food ⁶	Prof. Dr. Zoran Popovski	75	10
Enology ^{4,7,8}	Prof. Dr. Mihail Petkov	75	10
Fiber Crops ^{1,5}	Prof. Dr. Zoran Dimov	75	10
Evaluation and Treatment of Tobacco ¹	Prof. Dr. Zlatko Arsov	75	10
Evaluation of Tobacco Quality ⁶	Prof. Dr. Zlatko Arsov	75	10
Genetic Engineering of Plants ⁵	Prof. Dr. Ljupcho Jankuloski	75	10
Vegetable Production ⁵	Prof. Dr. Gordana Popsimonova	75	10
Grapevine Alcoholic Beverages ⁸	Prof. Dr. Zvonimir Bozinovich	75	10
Distillation ⁸	Prof. Dr. Mihail Petkov	75	10
Postharvest Technologies and Standardization of Vegetable and Flower Crops ²	Prof. Dr. Gjorgji Martinovski	75	10
Ecology of Vine Grape ^{4,7,8}	Prof. Dr. Elizabeta Angelova, Prof. Dr. Srebra Ilikj Popova, Prof. Dr. Tatjana Mitkova	75	10
Eco-viticulture ⁴	Prof. Dr. Krum Boskov	75	10
Ecological Bases for Fruit Crops ³	Prof. Dr. Tatjana Mitkova/Prof. Dr. Srebra Ilikj Popova	75	10
Wine-chemistry ⁷	Prof. Dr. Mihail Petkov	75	10
Spicy and Aromatic Plants ⁶	Prof. Dr. Zoran Dimov	75	10
Greenhouses in Vegetable and Flower Crops Production ²	Prof. Dr. Gjorgji Martinovski	75	10
Maturing of Distillates ⁸	Prof. Dr. Krum Boskov	75	10
Grain Cereal Crops ^{1,5,6}	Prof. Dr. Goce Vasilevski	75	10
Grains Legume Crops ^{1,5,6}	Prof. Dr. Dane Bosev	75	10
Rootstocks in Fruit Production ^{3,5}	Ass. Prof. Toso Arsov	75	10
Selection of Rootstocks and Grapevine Varieties ⁴	Prof. Dr. Zvonimir Bozinovich	75	10
Fruit Varieties ^{3,5}	Ass. Dr. Bojan Popovski	75	10
Selected Technologies in Flower Crop Pproduction ^{2,5}	Prof. Dr. Stefanka Hadji Pecova	75	10
Industrial Plants for Production of Oil, Sugar and Alkaloids ^{1,6}	Prof. Dr. Zoran Dimov	75	10
Integrated and Organic Fruit Production ³	Prof. Dr. Marjan Kiprijanovski	75	10
Quality Characteristics of Grapevine Raw Material ⁸	Prof. Dr. Petar Hristov	75	10
Quantitative Genetics ⁵	Ass. Dr. Mirjana Jankulovska	75	10

Climate Zoning of Viticulture and Wine Region ⁴	Prof. Dr. Srebra Ilikj Popova / Prof. Dr. Klime Beleski	75	10
Crops for Production of Oil and Sugar ^{1,5}	Prof. Dr. Zoran Dimov	75	10
Bread Crops and other Cereal Crops ⁶	Prof. Dr. Goce Vasileski	75	10
Manipulation and Fermentation of Tobacco ⁶	Prof. Dr. Zlatko Arsov	75	10
Microbiology of Food ⁶	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	75	10
Molecular Methods in Genetics and Breeding ^{3,5}	Prof. Dr. Ljupcho Jankulovski	75	10
Grapevine Breeding ⁴	Prof. Dr. Klime Beleski	75	10
Processing of Distillation Raw Material ⁸	Prof. Dr. Krum Boskov	75	10
Fruit and Grain Alcoholic Beverages ⁸	Prof. Dr. Krum Boskov	75	10
Cultivation of Medicinal and Aromatic Plants ^{1,8}	Prof. Dr. Zoran Dimov	75	10
Winery Equipment ⁷	Prof. Dr. Krum Boskov	75	10
Organic Production of Vegetable and Flower Crops ²	Prof. Dr. Rukie Agich	75	10
Basic Knowledge in Viticulture ^{3,4,7,8}	Prof. Dr. Zvonimir Bozinovich	75	10
Basic Knowledge of Grapevine Rootstock ^{5,7,8}	Prof. Dr. Klime Beleski	75	10
Processing of Grapevine ⁴	Prof. Dr. Mihail Petkov	75	10
Applied Genetics ⁵	Prof. Dr. Cane Stojkovski	75	10
Applied Plant Breeding ⁵	Prof. Dr. Ljubomir Marinkovich	75	10
Applied Biotechnology in Fruit Production ^{5,8}	Prof. Dr. Marjan Kiprijanovski	75	10
Prognosis and Monitoring of Biological Harmful Agents ^{1,2}	Prof. Dr. Mile Postolovski/Prof. Dr. Rade Rusevski /Ass. Dr. Zvonko Pacanoski	75	10
Designing and Establishment of Orchards ³	Prof. Dr. Marjan Kiprijanovski	75	10
Wine Production Technologies ⁷	Prof. Dr. Mihail Petkov	75	10
Production of Alcoholic Beverages ⁷	Prof. Dr. Krum Boskov	75	10
Production of Grapevine ^{4,7}	Prof. Dr. Petar Hristov	75	10
Production of Vegetable Seed and Seedlings ²	Prof. Dr. Rukie Agich	75	10
Production of Special Wines ^{4,7,8}	Prof. Dr. Mihail Petkov	75	10
Production, Packing and Storage of Table Grape ⁴	Prof. Dr. Krum Boskov	75	10
Plants for Production of Forage ⁶	Prof. Dr. Tatjana Prentovikj	75	10
Propagation of Grapevine ^{5,7,8}	Prof. Dr. Petar Hristov	75	10
Plant Genetic Resources ⁵	Prof. Dr. Sonja Ivanovska	75	10
Climate Zoning of Viticulture and Wine Region ⁷	Prof. Dr. Srebra Ilikj Popova / Prof. Dr. Klime Beleski	75	10
Breeding with Seed Production ⁵	Prof. Dr. Ljubomir Marinkovich	75	10
Seed Production with Quality Control of Seed ⁵	Prof. Dr. Ljubomir Marinkovich	75	10

Sensor Evaluation of Wine ⁷	Prof. Dr. Zvonimir Bozinovich	75	10
Systematics and Classification of Tobacco ^{1, 5}	Prof. Dr. Zlatko Arsov	75	10
Agribusiness Accounting ^{1, 2}	Ass. Prof. Aleksandra Martinovska-Stojceska	75	10
Contemporary Genetic Methods in Crop Production ⁵	Prof. Dr. Ljupcho Jankulovski	75	10
Grapevine Varieties for Wine Production ⁷	Prof. Dr. Zvonimir Bozinovich	75	10
Special Breeding ³	Ass. Prof. Bojan Popovski	75	10
Strategic Management in Agriculture ^{1, 2}	Prof. Dr. Mile Pesevski	75	10
Technology of Oil and Sugar ⁶	Prof. Dr. Zoran Dimov	75	10
Technology of Milling Products ^{1,6}	Prof. Dr. Goce Vasileski	75	10
Technology of Processing of Forage Crops ⁶	Prof. Dr. Tatjana Prentovikj	75	10
Technology of Storage and Confectioning of Fruits ³	Ass. Dr. Toso Arsov	75	10
Technology of Malt and Beer ^{1,6}	Prof. Dr. Dane Bosev	75	10
Technology of Tobacco Products ⁶	Prof. Dr. Zlatko Arsov	75	10
Grass and Forage Crops ^{1, 5}	Prof. Dr. Petre Ivanoski	75	10
Use of Plant Genetic Resources ⁵	Prof. Dr. Sonja Ivanovska	75	10
Fermentation of Grapevine Raw Material ⁸	Prof. Dr. Mihail Petkov	75	10
Plant Physiology ^{1, 3}	Prof. Dr. Marina Stojanova / Prof. Dr. Silvana Manasievska-Simich	75	10
Forming of Vineyards ⁴	Prof. Dr. Petar Hristov	75	10
Forage and Grain Legume Crops ^{1, 5}	Prof. Dr. Tatjana Prentovikj	75	10
Flower Crop Production ⁵	Prof. Dr. Stefanka Hadji Pecova	75	10
Industrial Plants for Production of Oil, Sugar and Alkaloids ⁶	Prof. Dr. Zoran Dimov	75	10
Applied Biotechnology in Viticulture ^{4, 7, 8}	Prof. Dr. Petar Hristov	75	10
Plants for Production of Forage ^{1,6}	Prof. Dr. Tatjana Prentovikj	75	10
Alternative Grapevine and Wine Products ^{4, 7, 8}	Prof. Dr. Krum Boskov	75	10
Tissue Culture ^{3, 5}	Prof. Dr. Sonja Ivanovska	75	10
Tobacco and Tobacco and Seed Production ^{1, 5}	Prof. Dr. Zlatko Arsov	75	10
Technological Microbiology–selected chapters ^{7, 8}	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	75	10
Agricultural Entomology and Zoology ^{1,2,3,4,5}	Prof. Dr. Stanislava Lazarevska Prof. Dr. Mile Postolovski	75	10
Agricultural Phytopathology ^{1,2,3,4,5}	Prof. Dr. Rade Rusevski Ass. Biljana Kuzmanovska	75	10
Advanced Herbology ^{1,2,3,4,5}	Ass. Dr. Zvonko Pacanoski	75	10
Integrated Pest Management ^{1,2,3,4,5}	Prof. Dr. Mile Postolovski Ass. Dr. Ljupcho Jankuloski	75	10

SUPERSCRIPTS ^{1,2,3,4,5,6,7} and ⁸ ARE RELATED TO APPROPRIATE GROUP OF ELECTIVE COURSES WITHIN THE MODULES:

1. FIELD CROP PRODUCTION
2. VEGETABLE AND FLOWER CROP PRODUCTION
3. FRUIT CROP PRODUCTION
4. VITICULTURE
5. PLANTS BREEDING AND SELECTION
6. PROCESSING OF FIELD CROPS
7. WINE PRODUCTION
8. PRODUCTION OF ALCOHOLIC BEVERAGES

STUDY PROGRAMME: ANIMAL BIOTECHNOLOGY

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	9	56.25
Elective courses from the Faculty list	5	31.25
Elective courses from the University list	2	12.50
Total	16	100.00

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
-compulsory courses				
1.	Molecular Biology of Animal Cell-selected chapters	Ass. Dr. Blagica Dimitrievska Prof. Dr. Zoran Popovski	90	10
2.	Applied Feed Nutrition-selected chapters	Prof. Dr. Srecko Gjorgjievski	90	10
-elective courses (the student can choose one course from list 1)				
3.			60	4
-elective courses (the student can choose one course from the University list of courses)				
4.			30	2
Total in first semester			270	26

No.	Courses	Professor	No. of hours	ECTS
SECOND SEMESTER				
Compulsory courses				
1.	Population Genetics-selected chapters	Prof. Dr. Sreten Andonov	90	10
2.	Selection of Domestic Animals-selected chapters	Prof. Dr. Vlado Vukovich	90	10
3.	Animal Health Protection–selected chapters	Prof. Dr. Metodija Trajchev	90	10
-elective courses (the student can choose one course from list 1)				
4.			60	4
Total in second semester			330	34

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
III SEMESTER				
Compulsory courses				
1.	Selected Chapters from Biochemistry and Molecular Biology	Ass. Dr. Blagica Dimitrievska Prof. Dr. Zoran Popovski	60	4
2.	Animal Health and Welfare – selected chapters	Prof. Dr. Metodija Trajchev	60	4
3.	Research Methods	Prof. Dr. Vlado Vukovich	60	4
4.	Biometry	Prof. Dr. Sreten Andonov	60	4
- elective courses (the student can choose three courses from list 1)				
5.			60	4
6.			60	4
7.			60	4
- elective courses (the student can choose one course from the University list of courses)				
8.			30	2
Total in third semester			450	30

FORTH SEMESTER		No. of hours	ECTS
MASTER THESIS			30
		<i>Total in forth semester</i>	30
		<i>Total:</i>	120

LIST 1 (elective courses)

Courses	Professor	No. of hours	ECTS
Advanced Livestock Production-selected chapters	Prof. Dr. Vladimir Dzabirski Prof. Dr. Vlado Vukovich Prof. Dr. Gjoko Bunevski Prof. Dr. Dragoslav Kocevski	60	4
Animal Genomes ¹	Prof. Dr. Zoran Popovski	60	4
Techniques of Genetic Engineering ¹	Ass. Prof. Blagica Dimitrievska	60	4
Genetics and Selection–selected chapters ^{1,4,5,6,7,8,10}	Prof. Dr. Vlado Vukovich Prof. Dr. Vladimir Dzabirski Prof. Dr. Gjoko Bunevski Prof. Dr. Sreten Andonov Prof. Dr. Hrisula Kiprijanovska Ass. Prof. Kocho Porchu	60	4
Estimation of Genetic Parameters ¹	Prof. Dr. Sreten Andonov	60	4
Applied Genetics ¹	Prof. Dr. Sonja Ivanovska	60	4
Experimental Methods in Animal Nutrition ²	Prof. Dr. Srecko Gjorgijevski	60	4
Physiology of Animal Digestion ²	Prof. Dr. Zoran Popovski	60	4
Microbiology–selected chapters ²	Prof. Dr. Olga Najdenovska	60	4
Animal Nutrition Biotechnology ²	Prof. Dr. Srecko Gjorgijevski	60	4
Etology and Stress in Animals ³	Prof. Dr. Metodija Trajchev	60	4
Pathogenicity, Pathogenesis and Immunology ³	Prof. Dr. Slavcho Mrenoshki	60	4
Morphological Parameters and Animal Welfare Assessment ³	Prof. Dr. Vlatko Ilieski	60	4
Biosecurity for Livestock Farms-selected chapters ^{3,4,5,6,7,8,10}	Prof. Dr. Metodija Trajchev	60	4
Breeding Programs–Selected Chapters ^{4,5,6,7,8}	Prof. Dr. Dragoslav Kocevski Prof. Dr. Vladimir Dzabirski Prof. Dr. Gjoko Bunevski Prof. Dr. Sreten Andonov Prof. Dr. Hrisula Kiprijanovska Ass. Prof. Kocho Porchu	60	4
Reproduction-Selected Chapters ^{3,4,5,6,7,8}	Prof. Dr. Dragoslav Kocevski Prof. Dr. Vlado Vukovic Prof. Dr. Vladimir Dzabirski Prof. Dr. Gjoko Bunevski Prof. Dr. Sreten Andonov Prof. Dr. Hrisula Kiprijanovska Ass. Prof. Kocho Porchu	60	4

Applied Nutrition–selected chapters ^{4,5,6,7,8,9}	Prof. Dr. Srecko Gjorgijevski	60	4
Aquatic Ecosystems–selected chapters ⁹	Prof. Dr. Mirche Naumovski	60	4
Intensive Fish Production–selected chapters ⁹	Prof. Dr. Mirche Naumovski	60	4
Transportation of Fish and Fish Eggs ⁹	Prof. Dr. Vasil Kostov	60	4
Storage and Fish Processing ⁹	Ass. Prof. Katerina Belichovska	60	4
Technology of Honeybee Breeding ¹⁰	Prof. Dr. Hrisula Kiprijanovska	60	4
Honey Plants ¹⁰	Prof. Dr. Zoran Dimov	60	4
Production of Bee Products ¹⁰	Prof. Dr. Hrisula Kiprijanovska	60	4
Dairy Processing Industry ^{3,4,5,6}	Prof. Dr. Sonja Srbinovska	60	4
Technology Processes in Meat Industry ^{3,4,5,6}	Prof. Dr. Zlatko Pejkovski	60	4
Plants for Production of Forage ^{4,5,6}	Prof. Dr. Tatjana Prentovikj	60	4

SUPERSCRIPTS ^{1,2,3,4,5,6,7,8,9, И 10} ARE RELATED TO APPROPRIATE GROUP OF ELECTIVE COURSES WITHIN THE MODULE

- 1- ANIMAL NUTRITION
- 2- MANAGEMENT of ANIMAL HEALTH AND WELFARE
- 3- CATTLE PRODUCTION
- 4- SHEEP PRODUCTION
- 5- GOAT PRODUCTION
- 6- PIG PRODUCTION
- 7- POULTRY PRODUCTION
- 8- FISHERIES
- 9- BEEKEEPING

STUDY PROGRAMME: PROCESSING OF AGRICULTURAL PRODUCTS FROM ANIMAL ORIGIN

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	8	53.33
Elective courses from the Faculty list	5	33.33
Elective courses from the University list	2	13.34
Total	15	100.00

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
- Compulsory courses				
1.	Selected Chapters from Animal Biotechnology-Milk	Prof. Dr. Vladimir Dzabirski Prof. Dr. Gjoko Bunevski Ass. Prof. Kocho Porchu	90	10
2.	Selected Chapters from Animal Biotechnology-Meat	Prof. Dr. Dragoslav Kocevski Prof. Dr. Vlado Vukovich Prof. Dr. Vladimir Dzabirski Prof. Dr. Gjoko Bunevski	90	10
- Elective courses (the student can choose one course from list 1)				
3.			90	8
- Elective courses (the student can choose one course from the University list)				
4.			30	2
Total in first semester			300	30

No.	Courses	Professor	No. of hours	ECTS
SECOND SEMESTER				
Compulsory courses				
1.	Milk and Dairy Products Technology-Selected Chapters	Prof. Dr. Sonja Srbinovska	90	10
2.	Technology of Meat and Meat Products-Selected Chapters	Prof. Dr. Zlatko Pejkovski	90	10
- Elective courses (the student can choose one course from list 1)				
3.			90	10
Total in second semester			270	30

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
COMPULSORY COURSES				
1.	Biochemistry of Animal Products– selected chapters	Ass. Prof. Blagica Dimitrievska Prof. Dr. Zoran Popovski	60	4
2.	Microbiology of Animal Products– selected chapters	Pro.f Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	60	4
3.	Research Methods	Prof. Dr. Vlado Vukovich	60	4
4.	Biometry	Prof. Dr. Sreten Andonov	60	4
- Elective courses (the student can choose three courses from list 1)				
5.			60	4
6.			60	4
7.			60	4
- Elective courses (the student can choose one course from the University list)				
			30	2
Total in third semester			450	30

FORTH SEMESTER			No. of hours	ECTS
MASTER THESIS				30
Total in forth semester				30
Total:				120

LIST 1 (elective courses)

Courses	Professor	No. of hours	ECTS
Applied Analytical Methods in Control of Animal Products	Prof. Dr. Biljana Petanovska-Ilievska	90	8
Control and Legislation of Food from Animal Origin	Prof. Dr. Sonja Srbinovska Prof. Dr. Metodija Trajchev	90	10
Milk Chemistry and Physics ¹	Prof. Dr. Sonja Srbinovska	60	4
Dairy Processing Industry ^{1,4}	Prof. Dr. Sonja Srbinovska	60	4
Probiotics and Functional Properties of Milk and Dairy Products ¹	Prof. Dr. Sonja Srbinovska	60	4
Meat Structure and Characteristics ²	Prof. Dr. Zlatko Pejkovski	60	4
Technology Processes in Meat Industry ^{2,4}	Prof. Dr. Zlatko Pejkovski	60	4
Technology of Ready to Eat Meals ²	Prof. Dr. Zlatko Pejkovski	60	4
Nutritional Biochemistry ³	Prof. Dr. Zoran Popovski	60	4
Applied Dietetics ³	Prof. Dr. Srecko Gjorgjevski	60	4
Nutritional Risks ³	Prof. Dr. Metodija Trajchev	60	4
Safety Principles for Food of Animal Origin ⁴	Prof. Dr. Sonja Srbinovska Prof. Dr. Metodija Trajchev	60	4
Molecular Methods for Control of Animal Products ⁴	Ass.Prof. Blagica Dimitrievska	60	4

SUPERSCRIPTS ^{1,2,3} И ⁴ ARE RELATED TO APPROPRIATE GROUP OF ELECTIVE COURSES WITHIN THE MODULE :

- 1- MILK AND DAIRY PRODUCTS
- 2- MEAT AND MEAT PRODUCTS
- 3- NUTRITION
- 4- CONTROL AND SAFETY OF FOOD OF ANIMAL ORIGIN

STUDY PROGRAMME: AGRICULTURAL ECONOMICS

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	6	60.33
Elective courses from the Faculty list	3	30.00
Elective courses from the University list	1	10.00
Total	10	100.00

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
- compulsory courses				
1.	Strategic Management in Agriculture	Prof. Dr. Mile Peshevski	90	10
2.	Agribusiness Accounting	Ass. Prof. Aleksandra Martinovska Stojceska	90	10
- elective courses (the student can choose one of the courses proposed bellow)				
3.	Forms of Cooperation in Agriculture	Prof. Dr. Jovan Azderski	90	8
3.	Research Methods	Ass. Prof. Ana Kotevska	90	8
- elective courses (the student can choose one course from the University list of courses)				
			30	2
		Total in first semester	300	30

SECOND SEMESTAR				
- compulsory courses				
1.	Agricultural Marketing	Prof. Dr. Nenad Georgiev	90	10
2.	Rural Development Policy	Prof. Dr. Jovan Azderski	90	10
- elective courses (the student can choose one of the courses proposed bellow)				
3.	Enviornmental Economics	Prof. Dr. Elizabeta Angelova	90	10
3.	Operational Research in Agricyulture	Prof. Dr. Dragan Gjosevski	90	10
		Total in second semester	270	30

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Agricultural Policy	Prof. Dr. Dragi Dimitrievski	90	10
2.	Quantitative Financial Management in Agriculture	Prof. Dr. Dragan Gjosevski	90	10
- elective courses (the student can choose one of the courses proposed bellow)				
3.	International Trade of Agri-food Products	Prof. Dr. Nenad Georgiev	90	10
3.	Project Management	Prof. Dr. Dragi Dimitrievski	90	10
		Total in third semester	270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
MASTER THESIS				
		Total in fourth semester		30
		Total:		120

STUDY PROGRAMME: MANAGEMENT OF NATURAL RESOURCES AND ENVIRONMENT IN AGRICULTURE

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	6	60.00
Elective courses from the Faculty list	3	30.00
Elective courses from the University list	1	10.00
Total	10	100.00

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
COMPULSORY COURSES				
1.	Genesis, Evolution and Soil Classification	Prof. Dr. Josif Mitrikeski Prof. Dr. Tatjana Mitkova	90	10
2.	Principles of Ecological Agriculture	Prof. Dr. Olga Najdenovska Prof. Dr. Elizabeta Angelova	90	10
-elective courses (the student can choose one course from the list 1)				
3.			75	8
-elective courses (the student can choose one course from the University list of courses)				
4.			30	2
		Total in first semester	285	30

SECOND SEMESTER				
COMPULSORY COURSES				
1.	Plant Nutrition-selected chapters	Prof. Dr. Marina Stojanova	90	10
2.	Irrigation of Agricultural Crops-selected chapters	Prof. Dr. Ordan Chukaliev Ass. Prof. Vjekoslav Tanaskovikj	90	10
-elective courses (the student can choose one course from the list 1)				
3.			90	10
		Total in second semester	270	30

MODULE: IRRIGATION

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Principles and Techniques of Irrigation	Prof. Dr. Ordan Chukaliev	90	10
2.	Irrigation of Agricultural Crops	Ass. Prof. Vjekoslav Tanaskovikj	90	10
-elective courses (the student can choose one course from the list 1)				
3.			90	10
Total in third semester			270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
MASTER THESIS				30
Total in fourth semester				30
TOTAL:				120

MODULE: SOIL SCIENCE

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Meliorative Pedology	Prof. Dr. Josif Mitrikeski	90	10
2.	Soil Physics and Chemistry	Prof. Dr. Tatjana Mitkova	90	10
-elective courses (the student can choose one course from the list 1)				
3.			90	10
Total in third semester			270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
MASTER THESIS				
				30
Total in fourth semester				30
TOTAL:				120

MODULE: ECOLOGY

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Ecosystems	Prof. Dr. Elizabeta Angelova	90	10
2.	Interaction of Organisms	Prof. Dr. Elizabeta Angelova	90	10
-elective courses (the student can choose one course from the list 1)				
3.			90	10
		Total in third semester	270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
	MASTER THESIS			30
		Total in fourth semester		30
		TOTAL:		120

MODULE: SOURCES OF POLLUTION IN AGRICULTURE

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Management and Control of Pollution Sources in Agriculture	Prof. Dr. Olga Najdenovska	90	10
2.	Soil Microbiology-selected chapters	Prof. Dr. Olga Najdenovska	90	10
-elective courses (the student can choose one course from the list 1)				
3.			90	10
		Total in third semester	270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
	MASTER THESIS			30
		Total in fourth semester		30
		TOTAL:		120

MODULE: AGROCHEMISTRY

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Soil Fertility and Soil Agrochemical Mapping	Prof. Dr. Marina Stojanova	90	10
2.	Principles and Techniques of Fertilization	Prof. Dr. Kire Filipovski	90	10
-elective courses (the student can choose one course from the list 1)				
1.			90	10
			Total in third semester	270
			270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
MASTER THESIS				
				30
			Total in fourth semester	30
			TOTAL:	120

MODULE: LAND RECLAMATION AND EROSION IN AGRICULTURE

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Control of Erosion Processes in Agriculture	Prof. Dr. Aco Gichev	90	10
2.	Waters Protection-selected chapters	Prof. Dr. Marija Vukelic Shutoska	90	10
-elective courses (the student can choose one course from the list 1)				
3.			90	10
		Total in third semester	270	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
	MASTER THESIS			30
		Total in fourth semester		30
		TOTAL:		120

LIST 1. (Elective courses)

Courses	Professor	No. of hours	ECTS
Meliorative Pedology	Prof. Dr. Josif Mitrikeski	90	10
Mineralogy and Fundamentals of Petrography	Prof. Dr. Tatjana Mitkova Prof. Dr. Josif Mitrikeski	90	10
Exploitation, Degradation and Protection of Soils	Prof. Dr. Tatjana Mitkova Prof. Dr. Josif Mitrikeski Prof. Dr. Ordan Chukaliev	90	10
Soil Microbiology-selected chapters	Prof. Dr. Olga Najdenovska	90	10
Biomonitoring of Environment	Prof. Dr. Olga Najdenovska	90	10
Sustainable Management of Soils	Prof. Dr. Tatjana Mitkova	90	10
Water Quality	Prof. Dr. Ordan Chukaliev Ass. Prof. Vjekoslav Tanaskovikj	90	10
Marketing Environment and Social Responsibility	Prof. Dr. Nenad Georgiev	90	10
Bioremediation of Soils	Prof. Dr. Tatjana Mitkova Prof. Dr. Olga Najdenovska Prof. Dr. Tatjana Prentovic	90	10
Ecosystems	Prof. Dr. Elizabeta Angelova	90	10
Environmental Microbiology	Prof. Dr. Olga Najdenovska	90	10
Interaction of Organisms	Prof. Dr. Elizabeta Angelova	90	10
Global Ecology	Prof. Dr. Elizabeta Angelova	90	10
Fertilizers	Prof. Dr. Marina Stojanova	90	10
Laboratory Techniques and Field Trials	Prof. Dr. Marina Stojanova	90	10
Physics and Chemistry of Soils	Prof. Dr. Tatjana Mitkova	90	10
Flood Management	Prof. Dr. Marija Vukelic Shutoska	90	10
GIS and RS in Agriculture	Prof. Dr. Marija Vukelic Shutoska	90	10
Information Technologies in Irrigation	Prof. Dr. Ordan Chukaliev Ass. Prof. Vjekoslav Tanaskovikj	90	10
Genesis, Evolution and Soil Classification	Prof. Dr. Josif Mitrikeski	90	10
Soil Physics	Prof. Dr. Tatjana Mitkova	90	10
Soil Chemistry	Prof. Dr. Tatjana Mitkova	90	10
Soil Survey, Site Evaluation and Chemical Melioration	Prof. Dr. Josif Mitrikeski	90	10

Biomonitoring of the Pollution in Agroecosystems	Prof. Dr. Olga Najdenovska	90	10
Management and Control of Pollution Sources in Agriculture	Prof. Dr. Olga Najdenovska	90	10
Energy ecosystems-selected chapters	Prof. Dr. Elizabeta Angelova	90	10
Principles of Ecological Agriculture	Prof. Dr. Elizabeta Angelova	90	10
Plants Nutrition-selected chapters	Prof. Dr. Marina Stojanova	90	10
Soil Fertility and Soil Agrochemical Mapping	Prof. Dr. Marina Stojanova	90	10
Plant Physiology	Prof. Dr. Marina Stojanova / Prof. Dr. Silvana Manasievska Simich	90	10
Principles and Techniques of Fertilization	Prof. Dr. Kire Filipovski	90	10
Hydrotechnique-selected chapters	Prof. Dr. Marija Vukelikj Shutoska	75	8
Drainage	Prof. Dr. Aco Gichev	75	8
Control of Erosion Processes in Agriculture	Prof. Dr. Aco Gichev	90	10
Waters Protection-selected chapters	Prof. Dr. Marija Vukelikj Shutoska	90	10
Principles and Techniques of Irrigation	Prof. Dr. Ordan Chukaliev Assoc. Dr. Vjekoslav Tanaskovikj	90	10
Irrigation of Agricultural Crops	Prof. Dr. Ordan Chukaliev Assoc. Dr. Vjekoslav Tanaskovikj	90	10
Fertigation-selected chapters	Prof. Dr. Ordan Chukaliev Assoc. Dr. Vjekoslav Tanaskovikj	90	10
Viticulture–selected chapters	Prof. Dr. Zvonimir Bozinovikj	90	10
Grain Cereal Crops	Prof. Dr. Goce Vasilevski	90	10
Plants for Production of Forage	Prof. Dr. Tatjana Prentovikj	90	10
Industrial Crops for Production of Oil, Sugar and Alkaloids	Prof. Dr. Zoran Dimov	90	10
Production of Tobacco and Seeds	Prof. Dr. Zlatko Arsov	90	10
Fruit Srops Production–selected chapters	Prof. Dr. Marjan Kiprijanovski	90	10
Special Vegetable Production-selected chapters	Prof. Dr. Gjorgi Martinovski	90	10

STUDY PROGRAMME: FOOD QUALITY AND SAFETY

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	6	40.00
Elective courses from the Faculty list	7	46.67
Elective courses from the University list	2	13.33
Total	15	100.00

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
Compulsory courses				
1.	Botany – selected chapters	Prof. Dr. Silvana Manasievska Simich Ass. Prof. Elizabeta Miskoska Milevska	75	10
2.	Chemistry – selected chapters	Prof. Dr. Biljana Petanovska Ilievska	75	10
-elective courses (the student can choose one course from the list 1)				
1.	Plant Physiology and Nutrition	Prof. Dr. Silvana Manasievska Simich Prof. Dr. Marina Stojanovska	75	8
2.	Fruit and Vegetable Processing – selected chapters	Prof. Dr. Ljubica Karakashova	75	8
3.	Field Crops Products	Prof. Dr. Dane Boshev Prof. Dr. Zoran Dimov Prof. Dr. Tatjana Prentovikj	75	8
- elective courses (the student can choose one course from the University list of courses)				
			30	2
		Total in first semester	255	30

SECOND SEMESTER

Compulsory courses				
1.	Analytical Chemistry–selected chapters	Prof. Dr. Biljana Petanovska Ilievska	75	10
2.	Microbiology–selected chapters	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	75	10
-elective courses (the student can choose one course from the list 1)				
1.	Food Packiging	Prof. Dr. Biljana Petanovska Ilievska	75	10
2.	Milk and Dairy Products -selected chapters	Prof. Dr. Sonja Srbinovska	75	10
3.	Meat and Meat Products-selected chapters	Prof. Dr. Zlatko Pejkovski	75	10
4.	Technology of Wine and Alcoholic Beverages	Prof. Dr. Mihail Petkov Prof. Dr. Krum Boshkov	75	10
5.	Food Contol–selected chapters	Prof. Dr. Silvana Manasievska Simich	75	10
6.	Technological Microbiology-selected chapters	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	75	10
7.	Sensory Properties of Food-advanced chapters	Prof. Dr. Ljubica Karakashova Prof. Dr. Mihail Petkov Prof. Dr. Zlatko Pejkovski Prof. Dr. Sonja Srbinovska	75	10
		Total in second semester	225	30

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
Compulsory courses				
1.	Microbiological Hazards of Agricultural Products and Food - advanced chapters	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Metodija Trajchev	60	4
2.	Food Physical and Chemical Safety-- advanced chapters	Prof. Dr. Biljana Petanovska Ilievska	60	4
-elective courses (the student can choose two courses from the list 1)				
3.			60	4
4.			60	4
-elective courses (the student can choose three courses from the list 2)				
5.			60	4
6.			60	4
7.			60	4
- elective courses (the student can choose one course from the University list of courses)				
8.			30	2
		Total in third semester	450	30

FOURTH SEMESTER			No. of hours	ECTS
	MASTER THESIS			30
	Total in fourth semester			30
	TOTAL			120

LIST 1. (Elective courses)

Courses	Professor	No. of hours	ECTS
Biochemistry of the Microorganisms¹	Prof. Dr. Zoran Popovski Prof. Dr. Olga Najdenovska	60	4
Microbiology of Agricultural Products and Food¹	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	60	4
Food Preservation²	Prof. Dr. Ljubica Karakashova Prof. Dr. Sonja Srbinovska	60	4
Control of Botanical Origin of Food^{2,3}	Prof. Dr. Silvana Manasievska Simich	60	4
Ethnobotany³	Prof. Dr. Silvana Manasievska Simich Prof. Dr. Icko Gjorgovski	60	4
Fruit and Vegetable Processing-advance chapter⁴	Prof. Dr. Ljubica Karakashova	60	4
Quality of Processed Fruits and Vegetables⁴	Prof. Dr. Ljubica Karakashova	60	4

LIST 2. (Elective courses)

Fermentative Microbiology ¹	Prof. Dr. Olga Najdenovska	60	4
Genetics and Selection of the Microorganisms ¹	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	60	4
Microbiology of Soils and Waters ¹	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	60	4
Enology - selected chapters ¹	Prof. Dr. Mihail Petkov	60	4
Dairy Processing Industry ¹	Prof. Dr. Sonja Srbinovska	60	4
Technology Processes in Meat Industry ¹	Prof. Dr. Zlatko Pejkovski	60	4
Fruit and Vegetable Processing – selected chapters	Prof. Dr. Ljubica Karakashova	60	4
Food Quality and safety Systems ²	Prof. Dr. Biljana Petanovska Ilievska Prof. Dr. Sonja Srbinovska	60	4
Food Quality and Safety Standards ²	Prof. Dr. Biljana Petanovska Ilievska	60	4
Food Additives ^{2,4}	Prof. Dr. Biljana Petanovska Ilievska	60	4
Fruit and Vegetable Storage ^{2,4}	Prof. Dr. Ljubica Karakashova, Prof. Dr. Gorgi Martinovski	60	4
Management of Quality and Safety of Food – chosen chapters ²	Prof. Dr. Jugoslav Ziberovski	60	4
Feed Quality and Safty Standards ²	Prof. Dr. Srekko Gorgievski	60	4
Sanitation and Hygiene in Food Processing – advanced chapters ²	Prof. Dr. Pavle Sekulovski Prof. Dr. Metodija Trajchev	60	4
Food Engineering ²	Prof. Dr. Vesna Rafajlovska	60	4
Wild Edible Plants – selected chapters ³	Ass. Prof. Elizabeta Miskoska Milevska	60	4
Plant Physiology ³	Prof. Dr. Silvana Manasievska Simich Prof. Dr. Marina Stojanovska	60	4
Natural Aromatic and Medicinal Raw Materials - selected chapters ³	Ass. Prof. Elizabeta Miskoska Milevska	60	4
Fruit Crops ³	Ass. Prof. Tosho Arsov	60	4
Grain Cereals Crops ³	Prof. Dr. Goce Vasilevski	60	4
Grain Legumes Crops ³	Prof. Dr. Dane Boshev	60	4
Vegetable crop Production ³	Prof. Dr. Gorgi Martinovski	60	4
Autohtones Grapevine Varieties ³	Prof. Dr. Zvonko Bozinovich	60	4
Microbiology of Food ⁴	Prof. Dr. Jugoslav Ziberovski Prof. Dr. Olga Najdenovska	60	4
Wine and Alcoholic Beverages-selected chapters ⁴	Prof. Dr. Mihail Petkov	60	4
Special Vegetable Crop Production-selected chapters ⁴	Prof. Dr. Gorgi Martinovski	60	4
Special Fruit Crop Production - selected chapters ⁴	Ass. Prof. Bojan Popovski	60	4
Soil and Water Quality-advance chapter ⁴	Prof. Dr. Tatjana Mitkova Prof. Dr. Ordan Chukaliev	60	4
Biometry ^{1, 2, 3, 4}	Prof. Dr. Sonja Ivanovska Prof. Dr. Dragan Gjoshevski	60	4
Phytopharmacy ²	Prof. Dr. Mile Postolovski Prof. Dr. Rade Rusevski Prof. Dr. Zvonko Pacanoski	60	4

SUPERSCRIPTS ^{1,2,3,4,5} and ⁶ ARE RELATED TO APPROPRIATE GROUP OF ELECTIVE COURSES WITHIN THE MODULE:

1. MICROBIOLOGY
2. FOOD QUALITY AND SAFETY
3. ETHNOBOTANY
4. FRUIT AND VEGETABLE PROCESSING

STUDY PROGRAMME: PHYTOMEDICINE

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	6	40.00
Elective courses from the Faculty list	3	46.67
Elective courses from the University list	1	13.33
Total	10	100.00

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
COMPULSORY COURSES				
1.	Agricultural Zoocology	Prof. Dr. Stanislava Lazarevska Prof. Dr. Mile Postolovski	75	10
2.	Agro Ecology	Prof. Dr. Zvonko Pacanoski	75	10
-elective courses (the student can choose one course proposed bellow)				
3.	Biometry	Prof. Dr. Sonja Ivanovska	75	8
3.	Plant Protection and Environment	Prof. Dr. Mile Postolovski	75	8
- elective courses (the student can choose one course from the University list of courses)				
4.			30	2
Total in first semester			255	30

SECOND SEMESTER				
COMPULSORY COURSES				
1.	Entomology	Prof. Dr. Stanislava Lazarevska Prof. Dr. Mile Postolovski	75	10
2.	Phytopathology	Prof. Dr. Rade Rusevski Ass. Prof. Biljana Kuzmanovska	75	10
elective courses (the student can choose one course proposed bellow)				
3.	Agricultural Phitocenology	Prof. Dr. Zvonko Pacanoski	75	10
3.	Biological Plant Protection	Prof. Dr. Slobodan Bandjo	75	10
Total in second semester			225	30

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
COMPULSORY COURSES				
1.	Advanced Herbology	Prof. Dr. Zvonko Pacanoski	75	10
2.	Phytopharmacy with a Plant Eco-Toxicology	Prof. Dr. Mile Postolovski Prof. Dr. Rade Rusevski Prof. Dr. Zvonko Pacanoski	75	10
- elective courses (the student can choose one course proposed below)				
3.	GMO in Plant Protection	Prof. Dr. Stanislava Lazarevska Prof. Dr. Rade Rusevski Prof. Dr. Zvonko Pacanoski Prof. Dr. Ljubco Jankulovski	75	10
3.	Forecast and Monitoring of Harmful Biological Agents	Prof. Dr. Mile Postolovski Prof. Dr. Zvonko Pacanoski Prof. Dr. Rade Rusevski	75	10
3.	Research Methods in Phytomedicine	Prof. Dr. Stanislava Lazarevska Prof. Dr. Rade Rusevski Prof. Dr. Zvonko Pacanoski	75	10
3.	Viticulture-Selected Chapters	Prof. Dr. Zvonimir Bozinovich	75	10
3.	Grain Cereal Crops	Prof. Dr. Goce Vasilevski	75	10
3.	Plants for Production of Forage	Prof. Dr. Tatjana Prentovikj	75	10
3.	Industrial Crops for Production of Oil, Sugar and Alkaloids	Prof. Dr. Zoran Dimov	75	10
3.	Production of Tobacco and Seeds	Prof. Dr. Zlatko Arsov	75	10
3.	Fruit Production - selected chapters	Prof. Dr. Marijan Kiprijanoski	75	10
3.	Special Vegetable Crop Production-selected chapters	Prof. Dr. Gjorgji Martinovski	75	10
		Total in third semester	225	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
	MASTER THESIS			30
		Total in fourth semester		30
		Total:		120

STUDY PROGRAMME: AGRICULTURAL MECHANIZATION

TOTAL NUMBER OF COURSES IN THE STUDY PROGRAMME

Courses	Number	Structure
Compulsory	3	50.00
Elective courses from the Faculty list	2	33.33
Elective courses from the University list	1	16.67
Total	6	100.00

MODULE: Mechanization in Plant Production

FIRST YEAR

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
- compulsory courses				
1.	Theory of Agricultural Technique	Prof. Dr. Dragi Tanevski	90	10
2.	Mechanization-selected chapters	Ass. Prof. Ile Canev	90	10
-elective courses (the student can choose three courses from the list 1)				
3.	Agricultural Mechanization and Work Protection	Prof. Dr. Dragi Tanevski	90	8
4.	Precision Agriculture	Prof. Dr. Ordan Chukaliev	90	8
5.	Soil Physics	Prof. Dr. Tatjana Mitkova	90	8
- elective courses (the student can choose one course from the University list of courses)				
6.			30	2
		Total in first semester	405	30

SECOND SEMESTER				
- compulsory courses				
1.	Mechanization-selected chapters	Ass. Prof. Ile Canev	90	10
2.	Methodology and Technique of Investigation	Prof. Dr. Zivko Davcev	90	10
-elective courses (the student can choose three courses from the list 1)				
3.	Ergonomics of Tractors	Prof. Dr. Dragi Tanevski	90	8
4.	Irrigation Techniques	Ass. Prof. Vjekoslav Tanaskovikj	90	8
5.	Vegetable Crop Production	Prof. Dr. Gjorgi Martinovski	90	8
6.	Special Field Crop Production	Prof. Dr. Zoran Dimov		
- elective courses (the student can choose one course from the University list of courses)				
7.			30	2
		Total in first semester	405	30

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Engines and Tractors	Prof. Dr. Dragi Tanevski	90	10
2.	Exploitation of Agricultural Techniques	Prof. Dr. Zivko Davcev	90	10
-elective courses (the student can choose three courses from the list 1)				
3.	Harvesting Machine-selected chapters	Prof. Dr. Dragi Tanevski	90	8
4.	Service and Reparation of Agricultural Techniques	Prof. Dr. Zivko Davcev	90	8
5.	Basics in Field Crop Production	Prof. Dr. Zvonko Pacanoski	90	8
6.	Viticulture-selected chapters ¹	Prof. Dr. Zvonimir Bozinovikj	90	8
7.	Fruit Production-selected chapters ¹	Prof. Dr. Marjan Kiprijanovski	90	8
- elective courses (the student can choose one course from the University list of courses)				
6.			30	2
		Total in first semester	405	30

MODULE: Mechanization in Animal Production**FIRST YEAR**

No.	Courses	Professor	No. of hours	ECTS
FIRST SEMESTER				
- compulsory courses				
1.	Theory of Agricultural Technique	Prof. Dr. Dragi Tanevski	90	10
2.	Mechanization-selected chapters	Ass. Prof. Ile Canev	90	10
-elective courses (the student can choose three courses from the list 1)				
3.	Agricultural Mechanization and Work Protection	Prof. Dr. Dragi Tanevski	90	8
4.	Precision Agriculture	Prof. Dr. Ordan Chukaliev	90	8
- elective courses (the student can choose one course from the University list of courses)				
6.			30	2
		Total in first semester	405	30

SECOND SEMESTER				
- compulsory courses				
1.	Mechanization-selected chapters	Ass. Prof. Ile Canev	90	10
2.	Methodology and Technique of Investigation	Prof. Dr. Zivko Davcev	90	10
-elective courses (the student can choose three courses from the list 1)				
3.	Ergonomics of Tractors	Prof. Dr. Dragi Tanevski	90	8
4.	Automation in Agriculture Technique	Prof. Dr. Zivko Davcev	90	8
5.	Machinery for Preparing of Animal Feed	Prof. Dr. Dragi Tanevski	90	8
- elective courses (the student can choose one course from the University list of courses)				
7.			30	2
		Total in first semester	405	30

SECOND YEAR

No.	Courses	Professor	No. of hours	ECTS
THIRD SEMESTER				
- compulsory courses				
1.	Machinery and Equipment in Livestock Production	Prof. Dr. Dragi Tanevski	90	10
2.	Exploitations of Agriculture Machinery	Prof. Dr. Zivko Davcev	90	10
-elective courses (the student can choose three courses from the list 1)				
3.	Transport Equipment in Livestock Production	Prof. Dr. Dragi Tanevski	90	8
4.	Livestock Production	Prof. Dr. Gjoko Bunevski	90	8
5.	Plants for Production of Forage	Prof. Dr. Tatjana Prentovikj	90	8
- elective courses (the student can choose one course from the University list of courses)				
6.			30	2
		Total in first semester	405	30

No.	Courses	Professor	No. of hours	ECTS
FOURTH SEMESTER				
	MASTER THESIS			30
		Total in fourth semester		30
		Total:		120