

Faculty of Applied IT, Machine Intelligence and Robotics

Undergraduate FIRST CYCLE OF STUDIES

Study program: Applied ICT (e-Government, e-Business, e-Culture) 3 years

Active from academic 2019/2020

After completion of 3 years of studies, with 180 ECTS credits, students will get a degree of Bachelor of Applied ICT (e-Government, e-Business, e-Culture).

Applied ICT (EEE) 3 years

Year I				
Semester I				
No.	Code	Course Name	No. of classes	ECTS
Core Courses				
1	11.3.F.1101.C	Introduction to Programming	3+2	6
2	04.0.AITMIR.1102.C	e-Management	3+2	6
3	08.9.AITMIR.1103.C	e-Ethics	3+2	6
4	10.9.AITMIR.1104.C	e-Democracy	3+2	6
One Major Elective course				
5	xx.x.X.xxxx.MaE	Major Elective List	3+2	6
Year I				
Semester II				
No.	Code	Course Name	No. of classes	ECTS
1	16.0.AITMIR.1207.C	e-Governance	3+2	6
2	04.9.AITMIR.1208.C	Project management	3+2	6
3	15.9.AITMIR.1209.C	Social networks	3+2	6
Two Major Elective courses				
4	xx.x.X.xxxx.MaE	Major Elective List	3+2	6
5	xx.x.X.xxxx.MaE	Major Elective List	3+2	6

Year II				
Semester III				
No.	Code	Course Name	No. of classes	ECTS
1	10.9.AITMIR.1313.C	Law in information technologies	3+2	6
2	04.9.AITMIR.1314.C	Electronic commerce	3+2	6
3	15.9.AITMIR.1315.C	e-Media	3+2	6
4	11.3.AITMIR.1316.C	Relational databases	3+2	6
One Major Elective course				
5	xx.x.X.xxxx.MaE	Major Elective List	3+2	6
Year II				
Semester IV				
No.	Code	Course Name	No. of classes	ECTS
1	10.9.AITMIR.1419.C	e-Crime	3+2	6
2	04.9.AITMIR.1420.C	e-Banking	3+2	6
3	15.9.AITMIR.1421.C	e-Journalism	3+2	6
Two Major Elective courses				
4	xx.x.X.xxxx.MaE	Major Elective List	3+2	6
5	xx.x.X.xxxx.MaE	Major Elective List		
Year III				
Semester V				
No.	Code	Course Name	No. of classes	ECTS
1	10.9.AITMIR.1525.C	Electronic elections	3+2	6
2	04.7.AITMIR.1526.C	e-Marketing	3+2	6
3	03.9.AITMIR.1527.C	e-Gaming	3+2	6
4	11.3.AITMIR.1528.C	Algorithms and data structures	3+2	6
One Major Elective course				
5	xx.x.X.xxxx.MaE	Major Elective List	3+2	6

Year III				
Semester VI				
No.	Code	Course Name	No. of classes	ECTS
1	10.9.AITMIR.1631.C	Negotiations and dispute solving	3+2	6
2	04.9.AITMIR.1632.C	e-Accounting	3+2	6
3	03.9.AITMIR.1633.C	3D animations and visual effects	3+2	6
Two Major Elective courses				
4	xx.x.X.xxxx.MaE	Major Elective List	3+2	6
5	xx.x.X.xxxx.MaE	Major Elective List	3+2	6
				180

The first cycle of university studies recognizes the modules:

- C - mandatory (core),
- MaE - elected from the scientific field of the faculty

List of Major Elective courses				
id	code	Course	Weekly fund of hours	ECTS
1	11.9.F.1x41.MaE	Digital Electronics	3+2	6
2	11.9.F.1x06.MaE	System Theory	3+2	6
3	11.9.F.1x39.MaE	Unified Modelling Language	3+2	6
4	11.3.F.1x05.MaE	Network Analysis and Synthesis	3+2	6
5	11.9.F.1x40.MaE	Network Information theory	3+2	6
6	11.9.F.1x02.MaE	Digital Communication	3+2	6
7	11.9.F.1x08.MaE	Electromagnetic Principles	3+2	6
8	11.9.F.1x30.MaE	Wireless Technology	3+2	6
9	11.3.F.1x01.MaE	Client/server system	3+2	6
10	11.9.F.1x09.MaE	Integrated Systems Design	3+2	6
11	11.9.F.1x31.MaE	Visual Programming	3+2	6
12	11.3.F.1x14.MaE	Advanced Algorithms	3+2	6
13	11.9.F.1x12.MaE	Distance Learning Systems	3+2	6
14	11.9.F.1x36.MaE	Game Theory	3+2	6
15	11.9.F.1x37.MaE	Optimization Theory	3+2	6
16	11.9.F.1x18.MaE	Antenna Theory	3+2	6
17	11.3.F.1x13.MaE	NoSQL Databases	3+2	6
18	11.9.F.1x11.MaE	Radio Network Planning	3+2	6
19	11.9.F.1x21.MaE	Wireless ad-hoc Networks	3+2	6
20	11.9.F.1x22.MaE	Optical Communication	3+2	6
21	11.9.F.1x23.MaE	RF Circuits for ICT	3+2	6

University of Information Science and Technology "St. Paul the Apostle" - Ohrid

22	11.9.F.1x15.MaE	Embedded Systems	3+2	6
23	11.9.F.1x20.MaE	Systems based on knowledge	3+2	6
24	11.9.F.1x16.MaE	Sensor Networks	3+2	6
25	11.9.F.1x32.MaE	Web Design	3+2	6
26	11.3.F.1x24.MaE	Telecommunication Network Management	3+2	6
27	11.9.F.1x29.MaE	Natural Language Processing	3+2	6
28	11.9.F.1x17.MaE	Satellite Communications	3+2	6
29	11.3.F.1x25.MaE	Nanotechnology for ICT	3+2	6
30	11.9.F.1x03.MaE	Data Mining	3+2	6
31	11.9.F.1x33.MaE	Bioinformatics	3+2	6
32	11.9.F.1x26.MaE	Internet of things	3+2	6
33	11.9.F.1x27.MaE	Network Security	3+2	6
34	11.9.F.1x28.MaE	Data Security and Privacy	3+2	6
35	11.9.F.1x38.MaE	Wireless Network Security	3+2	6
36	11.3.F.1x34.MaE	Modern Functional Programming	3+2	6
37	11.3.F.1x35.MaE	Computer Architecture and Organization	3+2	6
38	11.9.F.1x42. MaE	Graph theory	3+2	6
39	11.9.F.1x19.MaE	Internet Technologies	3+2	6
40	11.9.F.1x07.MaE	Modelling and Simulations	3+2	6
41	09.0.F.xx55.MaE	Technical Communication 1	3+2	6
42	09.0.F.xx56.MaE	Technical Communication 2	3+2	6
43	11.1.F.1401.MaE	Numerical Methods	3+2	6
44	11.3.MIR.1401.MaE	3D Modelling and Animation	3+2	6
45	11.3.MIR.1402.MaE	Human-Computer Interaction	3+2	6
46	11.3.MIR.1403.MaE	Web Development	3+2	6
47	11.3.MIR.1404.MaE	Communication theory	3+2	6
48	11.3.MIR.1405.MaE	Digital signal processing	3+2	6
49	11.3.MIR.1406.MaE	Introduction to multimedia computing	3+2	6
50	11.3.MIR.1407.MaE	Design and Analysis of Algorithms	3+2	6
51	11.3.MIR.1408.MaE	Operating systems	3+2	6
52	11.3.MIR.1501.MaE	Visualization	3+2	6
53	11.9.F.1502.MaE	Basics of electronics	3+2	6
54	11.3.MIR.1502.MaE	User Interface Design	3+2	6
55	11.3.MIR.1503.MaE	Information theory	3+2	6
56	11.3.MIR.1504.MaE	Wired networks	3+2	6
57	11.3.MIR.1505.MaE	Multimedia Information Systems	3+2	6
58	11.3.MIR.1507.MaE	Digital signal and image processing	3+2	6
59	11.3.MIR.1508.MaE	Introduction to Computer Graphics	3+2	6
60	11.3.MIR.1510.MaE	Software Engineering	3+2	6
61	11.3.MIR.1601.MaE	Multimedia Project Management	3+2	6

University of Information Science and Technology "St. Paul the Apostle" - Ohrid

62	11.9.MIR.1602.MaE	Stochastic Processes	3+2	6
63	11.3.MIR.1603.MaE	Pattern Recognition	3+2	6
64	11.3.MIR.1604.MaE	Communication systems	3+2	6
65	11.3.MIR.1605.MaE	Internet Programming	3+2	6
66	11.3.F.1701.MaE	Data, Information, and Knowledge Engineering	3+2	6
67	11.3.MIR.1701.MaE	Cross-platform development	3+2	6
68	11.9.MIR.1702.MaE	Cryptography	3+2	6
69	11.3.MIR.1703.MaE	Networking	3+2	6
70	11.3.MIR.1801.MaE	Computer Vision	3+2	6
71	11.3.MIR.1802.MaE	Introduction to Digital video and sound technology	3+2	6
72	11.3.MIR.1704.MaE	Cloud computing	3+2	6
73	11.3.MIR.1804.MaE	Cyber security	3+2	6
74	11.3.MIR.1805.MaE	Parallel programming	3+2	6
75	11.3.F.1802.MaE	Event driven programming	3+2	6
76	11.9.MIR.1803.MaE	Dynamic Databases	3+2	6
77	11.9.MIR.1402.MR	Microprocessors	3+2	6
78	11.3.MIR.1703.MR	Communication Protocols	3+2	6
79	11.3.MIR.1702.MR	Virtual and augmented reality	3+2	6
80	03.9.F.1xxx.MaE	Animated storytelling	3+2	6
81	09.9.F.1xxx.MaE	Creative writing	3+2	6
82	08.0.AITMIR.1104.MaE	Digital humanitarianism	3+2	6
83	04.9.AITMIR.1105.MaE	Digital Economy	3+2	6
84	03.9.AITMIR.1106.MaE	Digital Arts	3+2	6
85	14.9.AITMIR.1210.MaE	Digital Society	3+2	6
86	04.9.AITMIR.1211.MaE	Production process management	3+2	6
87	03.9.AITMIR.1212.MaE	Graphic design	3+2	6
88	10.9.AITMIR.1316.MaE	e-Diplomacy	3+2	6
89	04.9.AITMIR.1317.MaE	Customer Relationship Management	3+2	6
90	03.9.AITMIR.1318.MaE	Web design	3+2	6
91	10.9.AITMIR.1422.MaE	Cyber security	3+2	6
92	04.9.AITMIR.1423.MaE	Business Law	3+2	6
93	03.9.AITMIR.1424.MaE	e-Entertainment	3+2	6
94	12.9.AITMIR.1528.MaE	e-Health	3+2	6
95	04.9.AITMIR.1529.MaE	Financial Mathematics	3+2	6
96	03.9.AITMIR.1530.MaE	Digital cinematography	3+2	6
97	10.9.AITMIR.1634.MaE	Open government	3+2	6
98	04.9.AITMIR.1635.MaE	Modeling business processes	3+2	6
99	03.9.AITMIR.1636.MaE	Digital processing of audio signals and music	3+2	6