

admission winter semester of 2024/2025 academic year

№	Course Code	Course Title	Type- C, E, O	Semester	ECTS credits	Classes - total number					Classes per week	Assessment* - e, ca, ce, cont.
						Total	Lectures	Seminars	Practical Classes/ Observation	Self study		
1	2	3	4	5	6	7	8	9	10	11	12	13

**Core Subjects**

1	M 9 5 7	General Astronomy	C/E*	1	6	180	45	30	0	105	3 2 0	E
2	M 9 5 8	General Astrophysics	C/E*	2	6	180	45	30	15	90	3 2 1	E
3	M 9 5 9	Stellar Astrophysics	C/E*	2	6	180	45	30	0	105	3 2 0	E
4	M 9 6 0	Astronomical practice	C	2	5	150	15	0	60	75	1 0 4	E

\* These courses are compulsory for students who have not earned their Bachelor degree within the program „Astronomy, Meteorology and Astrophysics“ at the Faculty of Physics. Students who have taken these courses in their Bachelor study are not allowed to elect them again.

**Elective Courses – the students have to elect from a list of 24 elective courses (including the courses marked as C/E\* above). These elective courses must bring at least 70 ECTS credits: 30 ECTS credits in the first semester, 25 ECTS credits in the second semester and 15 ECTS credits in the third semester**

1	M 9 6 1	Statistical Methods in Astronomy	E	1	4	120	15	45	0	60	1 3 0	E
2	M 9 6 2	Solar Physics. Solar Activity.	E	1	4	120	45	15	0	60	3 1 0	E
3	M 9 6 3	Modern Observational Methods in Astronomy	E	1	4	120	30	30	0	60	2 2 0	E
4	M 9 6 4	Modern Ideas in Astronomy	E	1	3	90	30	15	0	45	2 1 0	E
5	M 9 6 5	Stellar Atmospheres	E	1	4	120	30	15	0	75	1 2 0	E
6	M 9 6 6	Photometric Methods in Astronomy	E	1	6	180	30	30	30	90	2 2 2	E
7	M 9 6 7	The Andromeda Galaxy	E	1	3.5	105	30	15	0	60	2 1 0	E
8	M 9 6 8	Galactic Astronomy	E	1	4	120	30	30	0	60	2 2 0	E
9	M 9 6 9	Writing Astronomical Papers	E	1	4.5	135	30	0	30	75	2 0 2	E
10	M 9 7 0	High-luminosity Stars	E	2	5	150	45	30	0	75	3 2 0	E
11	M 9 7 1	Cosmology	E	2	4	120	45	15	0	60	3 1 0	E
12	M 9 7 2	Active Galactic Nuclei	E	2	4	120	45	15	0	60	3 1 0	E
13	M 9 7 3	Nonstationary Stars	E	2	4	120	45	15	0	60	3 1 0	E
14	M 9 7 4	Radioastronomy	E	2	6	180	45	0	45	90	3 0 3	E

15	M	9	7	5	Exoplanets and Search for Life in the Cosmos	E	2	4	120	45	15	0	60	3 1 0	E
16	M	9	7	6	Communication of Astronomy	E	2	4	120	30	30	0	60	2 2 0	E
17	M	9	7	7	Introduction and Modern Trends in Space Weather Research	E	2	3.5	105	30	15	0	60	2 1 0	E
18	M	9	7	8	Astrospectroscopy	E	3	4	120	15	0	45	60	1 0 3	E
19	M	9	7	9	Surface Photometry of Galaxies	E	3	5	150	30	30	0	90	2 2 0	E
20	M	9	8	0	Stellar Structure and Evolution	E	3	5	150	45	15	0	90	3 1 0	E
21	M	9	8	1	Interstellar Medium and Star Formation	E	3	5	150	45	15	0	90	3 1 0	E

#### Optional courses

1	M	9	8	2	Nanosatellites	O	2	3.5	105	15	30	0	60	1 2 0	E
2	M	9	8	3	Theory and Practice of Satellite Communications	O	2	3.5	105	15	30	0	60	1 2 0	E

#### Internships

No	code	Internship	Type- C, E, O	Semester	ECTS credits	weeks	hours	Форма на контрол* - И, ТО, КИ

#### Degree Completion

Form of degree completion	ECTS credits	First State Exam Session	Second State Exam Session
Defence of a Master thesis	15	February	July

The curriculum has been approved by the Faculty Council, Record of Proceedings №

17/12.12.2023

DEAN:.....

Sofia University "St. Kliment Ohridski"

**Curriculum Reference Statement**

Area of Study "Astrophysics, meteorology and geophysics" / Master's program in "Astronomy and Astrophysics"

form of study full time length of study: 3 Semesters

Course hours, ECTS credits and number of grades per semester																																	
Type of courses	I			II			III			IV			V			VI			VII			VIII			IX			X			Общо		
	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades	course hours	ECTS credits	number of grades			
compulsory courses	0	0	0	75	5	1	0	0	0																						75	5	1
min. elective courses	450	30	7	375	25	6	225	15	3																						1050	70	16
optional courses	0	0	0	90	7	2	0	0	0																						90	7	2
internships																																	
<b>Total:</b>	<b>450</b>	<b>30</b>	<b>7</b>	<b>450</b>	<b>30</b>	<b>7</b>	<b>225</b>	<b>15</b>	<b>3</b>																						<b>1125</b>	<b>75</b>	<b>17</b>

Form of degree completion	ECTS credits	Study Hours	First State Exam session	Second State Exam Session
Defence of an Master's thesis	15	450	February	July

**Acquired Professional Qualification** Master of Science in "Astrophysics, meteorology and geophysics" – Astronomy and Astrophysics

**Record of Proceedings of the Faculty Council №** 17/12.12.2023

**Dean:**