

COURSE STRUCTURE

2025-11160 Machines and equipment of casting and welding production (AZ) Master

1						2					
№	Course code	Title	Th	Pr	Ects	№	Course code	Title	Th	Pr	Ects
1	TQM 505	Energy machinery and devices	2	0+0	4	1	TQM 502	Quality control of castings	3	0+0	7
2	TQM 503	Modern problems of mechanical engineering	2	0+0	4	2	TQM 504	Hydropneumosystems of casting and welding devices	2	1+0	7
3	ENG 501	Academic English	0	3+0	6	3	PDQ 520	Pedagogy for Higher Education	2	0+0	4
4	TQM 501	History and methodology of mechanical engineering	2	0+0	2	4	PSİ 505	Psychology	2	0+0	2
5	TQM 507	Machine building materials	3	0+0	7	5	XXX XXX	[AE] Area elective course II #2	2	0+0	4
6	XXX XXX	[AE] Areal elective course IV #4	2	1+0	7	6	XXX XXX	[AE] Area elective course III #3	0	3+0	6
Subtotal: 30						Subtotal: 30					

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№	Course code	Title	Th	Pr	Ects
1	TQM 605	Theory of casting processes	3	0+0	7
2	TQM 601	Welding equipment and arrangements	3	0+0	7
3	TQM 603	Mechanization and automation of casting and welding processes	2	1+0	7
4	XXX XXX	[AE] Area elective course V #5	3	0+0	7
5	XXX XXX	[NAE] Non-area elective course I #1	2	0+0	2

Subtotal: 30

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№	Course code	Title	Th	Pr	Ects
1	TQM 680	Research experience	0	0+0	6
2	TQM 670	Scientific pedagogical experience	0	0+0	6
3	TQM 690	Master's thesis preparation	0	0+0	18

Subtotal: 30

Total ECTS credits: **120**

AE - Area Elective Courses

№	Course code	Title	Th	Pr	Ects
1	TQM 508	Research methods	2	0+0	4
2	TQM 506	Experiment planning and analysis	2	0+0	4
3	TQM 510	CAD/CAE systems in casting and welding equipment design	0	3+0	6
4	TQM 512	Special casting methods	0	3+0	6
5	TQM 513	Transmissions of casting machines	2	1+0	7
6	TQM 509	Welding technology and equipment	2	1+0	7
7	TQM 511	Innovative casting alloys and equipment	2	1+0	7
8	TQM 611	Technology of casting production	3	0+0	7
9	TQM 609	Melting equipment technology	3	0+0	7

