

Year	2011/2012
Faculty (institute)	Welding
Department	Welding Production
Field of study	0923 Welding
Speciality	8.092301 Welding Technology and Equipment
Degree	master
Qualification level	master
Qualification	research engineer

### First Year

First Semester		Second Semester	
Title	Credits	Title	Credits
Foreign language	0,5	Foreign language	1,0
Intellectual property	1,0	Pedagogics of higher school	1,5
Quality monitoring	4,0	Fundamentals of scientific research	2,0
Experimental research methods in welding	3,0	Material treatment with concentrated energy flows	4,0
Statistical methods of risk management in welding	4,0	Mathematical methods of optimization	4,0
		Renovational technologies of welding and related processes	3,0
Civil defence	1,0	Labour protection	1,0
Computer aided design in welding	3,0	Designing of technological processes of welding production	3,0
Designing of welding tooling	5,5	Computer aided design in welding	3,0
Engineering scientific data processing complexes	4,0	Designing of welding tooling	1,0
		Engineering scientific data processing complexes	4,5
Scientific research	4,5		
<b>Total</b>	<b>30,0</b>	<b>Total</b>	<b>27,0</b>

### Second Year

First Semester		Second Semester	
Title	Credits	Title	Credits
Foreign language	3,5		
Philosophic problems of scientific knowledge	1,5		
Fundamentals of the sustainable development of society	2,0		
Mathematical computer simulation techniques of systems and processes	4,0		
General bases of patents and copyright	2,0		
Physics of solids	3,0		
Applied analysis of experimental data	4,0		
Physical and chemical processes of welding and welding deposition	4,0		
		Research practice	6,0
		Master Thesis Preparation	25,5
Scientific research	6,0		
<b>Total</b>	<b>26,5</b>	<b>Total</b>	<b>31,5</b>

- humanities, social and economical courses
- mathematical, natural and scientific courses
- professional and practical courses