Study Programme: Automatic Control and Informatics in Industry 4.0
Form of Studies: Full-time
Academic Year: 2025/2026

1st Year Mgr.

Code	Compulsory subjects	Tutors	Winter semester					Summer semester				
			P	S	C	End	Cr	P	S	C	End	Cr
AE7DR	**Discrete Control**	*Matušů, AUART*	2	1	2	z, zk	7					
AE7AS	**Analysis and Simulation of Continuous Systems**	*Gazdoš, AURP*	2	0	2	z, zk	6					
AE7OP	**Optimisation**	*Prokop, AUM*	2	0	2	z, zk	5					
AE7PP	**Planning and Simulation of Production Processes**	*Vašek L. ext., AUART*	2	0	2	z, zk	6					
AE7PY	**Python for Industrial Control Systems**	*Novák, AUART*	0	0	3	kl	3					
AE7PL	**Advanced PLC Programming**	*Sysala, AUART*	0	0	3	kl	3					
AE8TD	**Technical Documentation and Presentation**	*Vojtěšek, AURP*						0	0	2	kl	4
AE8IS	**Systems Identification**	*Kubalčík, AURP*						2	1	2	z, zk	6
AE8SC	**Softcomputing in Automatic Control**	*Komínková Oplatková, AUIUI*						3	0	3	z, zk	6
AE8ZS	**Signal Processing**	*Kubalčík, AURP*						2	1	0	kl	4
AE8SV	**Machine Vision**	*Chalupa, Novák, AUART*						2	0	2	z, zk	5
	Subtotal		23				30	20				25

Code	Compulsory elective subjects *)	Tutors	Winter semester					Summer semester				
AE8SA	**State-space and Algebraic Control Theory**	*Gazdoš, AURP*						2	0	2	z, zk	5
AE8KD	**Kinematics and Dynamics of Mechatronic Systems**	*Novák, AUART*						2	0	2	z, zk	5
	Total		**23**				**30**	**24**				**30**

Code	Compulsory subjects	Tutors	Winter semester					Summer semester				
AE7PR	**Professional Placement**	*Vašek Vladimír **)*	120			z	5	120			z	5

*) The student chooses one of the offered compulsory elective subjects.
**) The Professional Placement subject (i.e. 120 hours work) can be fulfilled during any semester of their follow-up studies
Attachments can be found on the FAI website at: Student FAI / Výuka / Studijní plány - https://fai.utb.cz/student/vyuka/studijni-plany/

Study Programme:	**Automatic Control and Informatics in Industry 4.0**	**2nd Year Mgr.**
Form of Studies:	**Full-time**	
Academic Year:	**2025/2026**	

Code	Compulsory subjects	Tutors	Winter semester					Summer semester				
			P	S	C	End	Cr	P	S	C	End	Cr
AE9PR	**Industry 4.0**	*Vašek L. ext., AUART*	2	0	2	z, zk	5					
AE9SV	**Machine Vision**	*Novák, AUART*	2	0	2	z, zk	5					
AE9RR	**Real Process Control**	*Chalupa, AUART*	0	1	3	kl	5					
AE9DM	**Datamining**	*Šenkeřík, AUIUI*	2	0	2	z, zk	5					
AE9RO	**Term Project**	*Vašek V., AUART*	0	1	0	z	1					
AE0TP	**Technology of Industrial Information Systems**	*Neumann, AUEM*						2	0	2	z, zk	4
AE0PR	**Designing Real Control Systems**	*Chalupa, Novák, AUART*						1	0	5	kl	8
AE0ZP	**Business Basics**	*Novák, MUPE (FAME)*						2	1	0	kl	2
AE0PP	**Fundamentals of Emergency Health Aid**	*Burget, AUART*						7*	0	0	z	1
AE0DP	**Diploma Thesis**	*Vašek V., AUART*						0	0	18	z	18
	Subtotal			17			21		31			33

Code	Compulsory elective subjects *)	Kubalčík, AURP	Winter semester					Summer semester				
AE9PM	**Advanced Methods of Automatic Control**	*Kubalčík, AURP*	2	0	2	z, zk	6					
AE9RP	**Motion Control**	*Chalupa, AUART*	2	0	2	z, zk	6					
	Total			**21**			**27**		**31**			**33**

* The subject Fundamentals of Emergency Health Aid is taught in blocks of 7 hours per semester. Hours are not included in the total

The course Diploma Thesis (DT) includes not only individual work of students but also organized teaching for a total of 14 hours/semester in the following division into 2 teaching blocks:

Block 1: student presentations, presenting the status of the DT solution, approval of the DT outline, professional and formal requirements of the written DT, information on the faculty's job search a

Block 2: student presentations with the participation of DT leaders, presenting the almost finished DT.

The conditions and dates of these inspection days are set by the field supervisor at the beginning of the summer semester.