

Plan studiów na kierunku **Mechatronics (Mechatronika)**, I stopień, studia stacjonarne  
 Specjalność: **Mechatronics Devices and Systems**

**Semestr 1**

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
PHE1	Physical Education and Sports	zal.	0		30		
HES1	HES1/Patents and Intellectual Property	zal.	2	30			
OPA	Optics and Photonics Applications	zal.	3	30		15	
CAL1	Calculus I	E	7	30	45		
ALG	Algebra and Geometry	zal.	4	15	30		
ENG	Engineering Graphics	zal.	2	15	30		
MAT	Materials	zal.	2	30			
CS1	Computer Science I	zal.	6	30	30		
EPH	Engineering Physics	E	4	30	30		
			<b>30</b>	<b>210</b>	<b>195</b>	<b>15</b>	<b>0</b>

**Semestr 2**

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
PHE2	Physical Education and Sports	zal.	0		30		
HES2	HES2/ Economics	zal.	2	30			
ELEC1	Elective Lecture 1/Virtual and Augmented Reality	zal.	3	30			
CAL2	Calculus II	E	5	30	30		
ENGCad	Engineering Graphics - CAD	zal.	2				30
CS2	Computer Science II	zal.	3	15	15		
MCH	Mechanics	E	6	45	30	15	
MTR	Metrology	zal.	4	30		30	
EPHL	Engineering Physics Lab	zal.	2			15	
ELC1	Electric Circuits I	E	3	30	15		
			<b>30</b>	<b>210</b>	<b>120</b>	<b>60</b>	<b>30</b>

### Semestr 3

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
PHE3	Physical Education and Sports	zal.	0		30		
FOL1	Foreign Language	zal.	4		60		
ELEC2	Elective Lecture 2/Nanotechnologies and Nanomaterials	zal.	2	30			
MOS1	Mechanics of Structures I	E	4	30	15		
CAL3	Calculus III	E	6	15	30		
MNT1	Manufacturing Technology I	zal.	4	30			30
FMD1	Fine Machine Design I	zal.	3	15			30
ELC2	Electric Circuits II	zal.	3			30	
BAC1	Basics of Automation and Control I	E	4	30		15	
			<b>30</b>	<b>150</b>	<b>135</b>	<b>45</b>	<b>60</b>

### Semestr 4

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
FOL2	Foreign Language	zal.	4		60		
ELEC3	Elective Lecture 3	zal.	2	30			
HES3	HES 3/ Entrepreneurship	zal.	3	30			
OMCS	Optomechatronics	zal.	4	30		15	
ELT1	Electronics	E	4	30	15	15	
FMD2	Fine Machine Design II	E	4	30		15	15
MNT2	Manufacturing Technology II	zal.	2			30	

MOS2	Mechanics of Structures II	zal.	4	15	30		15
GDT	Geometric dimensioning and tolerancing	zal.	3	15	15		15
			<b>30</b>	<b>180</b>	<b>120</b>	<b>75</b>	<b>45</b>

### Semestr 5

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
FOL3	Foreign Language	zal.	4		60		
ROB	Robotics	zal.	3	30		15	
EMTR	Electric Metrology	zal.	2	30			
FLM	Fluid Mechanics	zal.	3	30	15		
FMD3	Fine Machine Design III	zal.	2	15	15		
HES 4	HES 4	zal.	2	30			
IAD	Industrial automata and devices	E	4	30			15
MPR	Matlab programming	zal.	2	15			15
3DCA	3D CAD applications	zal.	2	30			
MDR	Mechatronic Drives	E	4	30		15	15
ELEC4	Elective lecture 4	zal.	2	30			
			<b>30</b>	<b>270</b>	<b>90</b>	<b>30</b>	<b>45</b>

### Semestr 6

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
TMM	Theory of Machines and Mechanism	E	3	15			15
MCR	Microcontrollers	E	4	30		30	
SEMD	Sensors and Measuring devices	E	5	45		15	15
DEM	Design of electronic modules	zal.	2	15			15

IDS	Industrial Diagnostic systems	zal.	2	15		15	
ANS	ANSYS	zal.	2	15			15
SMD	Simulations in mechatronic design	zal.	3	15		30	
LVI	LabView	zal.	2		30		
MDE	Multimedia devices	zal.	3	15		15	
DEM	Design of Electronic Modules	zal.					15
MMS	MEMS	zal.	2	30			
EMTRL	Electric Metrology	zal.	2			15	
			<b>30</b>	<b>195</b>	<b>30</b>	<b>120</b>	<b>75</b>

## Semestr 7

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
ELEC5	Elective Lecture 5	zal.	2	30			
IDE	Industrial Design	zal.	3	15			15
MVI	Machine vision	zal.	3	15		15	15
MWO	Mechatronic Workshop*	zal.	5				75
DS.	Diploma seminar	zal.	2		30		
SD	Diploma thesis	E	15				
			<b>30</b>	<b>60</b>	<b>30</b>	<b>15</b>	<b>105</b>