

Plan studiów na kierunku **Mechatronics, I stopień, studia stacjonarne**

Specjalność: **Photonics Engineering**

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			
				30	210	195	15	0

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			
				30	210	120	60	30

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	
			30	150	135	45	60

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	Optomechanics	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
MTR	Geometric dimensioning and tolerancing	zal.	3	15	15		15
			30	180	120	75	45

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.	3	15			30	
OPMT	Optoelectronic Materials	zal.	2	15		15		
FOP	Fundamentals of Photonics	E	5	45		15		
IO1	Instrumental Optics I	E	5	30	30			
OFT	Optical Fiber Technology	zal.	4	30		15		
				31	225	90	75	30

Semestr 6

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P	
ELEC4	Elective Lecture 4/ Nanotechnologies i Nanomaterials	zal.	2	30				
EMTRL	Electric Metrology lab	zal.	2			15		
TOD	Technology of Optoelectronics Devices	zal.	2	15		15		
IO2	Instrumental Optics II	zal.	3			30		
LTEC	Laser Techniques	E	4	30		15		
PPD	Programming o Photonics Devices	zal.	4	15	15		15	
DOS	Design of Optical Systems	zal.	4	15			15	
MDPD	Mechanical Design of Photonic Devices	zal.	4	30			15	
IP	Interim project	zal.	5					
				30	135	15	75	45

Semestr 7

Skrót	Nazwa przedmiotu	Rygor	ECTS	W	C	L	P
ELEC5	Elective Lecture 5/ Academic Writing	zal.	1	30			
DIP	Digital Image Processing	zal.	4	30		15	15
PDS	Photonics Systems and Devices 3L	zal.	4	45		15	
ONMT	Opto-numerical Methods and Testing	E	4	30		30	
DS.	Diploma seminar	zal.	2		30		
SD	Diploma thesis	E	15				
			30	135	30	60	15