

## DESCRIPTION OF THE COURSES

- Course code: ELR3366
- Course title: BASIC ELECTRONICS ENGINEERING II
- Language of the lecturer: POLISH

<i>Course form</i>	<i>Lecture</i>	<i>Classes</i>	<i>Laboratory</i>	<i>Project</i>	<i>Seminar</i>
<i>Number of hours/week*</i>			2		
<i>Number of hours/semester*</i>			20		
<i>Form of the course completion</i>	examination		acceptance		
<i>ECTS credits</i>			2		
<i>Total Student's Workload</i>			60		

- Level of the course (basic/advanced): *BASIC*
- Prerequisites:  
*Lecture Basic Electronics Engineering I*
- Name, first name and degree of the lecturer/supervisor:  
*ANDRZEJ KAŁWAK / PhD*
- Names, first names and degrees of the team's members:  
*KRZYSZTOF PODLEJSKI / PhD*
- Year: 2 Semester: 4
- Type of the course (obligatory/optional): *OBLIGATORY*
- Aims of the course (effects of the course): Student should know elements and basic electronics circuits, their parameters, characteristics and properties as well as to design of simple circuits himself.
- Form of the teaching (traditional/e-learning): *TRADITIONALE*
- Course description:

*During laboratory classes students execute electronic circuits designed by themselves. They get to factors and properties of the circuits and methods of measurement.*

- Lecture:

<i>Particular lectures contents</i>	<i>Number of hours</i>
1.	
2.	
3.	
4.	
5.	
6.	

- Classes – the contents:
- Seminars – the contents:
- Laboratory – the contents:
  1. *Organization time – regulations, industrial safety, ...*
  2. *Semiconductors diodes*
  3. *Bipolar transistor amplifier*

4. *Unipolar transistor amplifier*
  5. *Operating amplifiers I*
  6. *Operating amplifiers II*
  7. *Differential amplifier*
  8. *Generation of electrical signals*
  9. *Combinative circuits*
  10. *Correction time*
- Project – the contents:
  - Basic literature:
 

*Tietze U., Schenk C.: Układy półprzewodnikowe. WNT Warszawa, 1987.*

*Horowitz P., Hill W.: Sztuka elektroniki. WKŁ, Warszawa, 1997*

*Baranowski J., Czajkowski G.: Układy elektroniczne. WNT, Warszawa, 1993*

*Górecki P.: Wzmacniacze operacyjne. BTC, Warszawa, 2002*

*Nadachowski M., Kulka Z.: Analogowe układy scalone. WKŁ, Warszawa, 1990*

*Niederliński A.: Mikroprocesory, mikrokomputery, mikrosystemy. WSiP, Warszawa, 1987*

*Pieńkoś J., Turczyński J.: Układy scalone TTL w systemach cyfrowych. WKŁ Warszawa, 1980*

*Misiurewicz P.: Podstawy techniki mikroprocesorowej. WNT, Warszawa, 1991*
  - Additional literature:
 

*Borkowski A.: Zasilanie urządzeń elektronicznych. WKŁ, Warszawa, 1990.*

*Rusek M., Pasierbiński J.: Elementy i układy elektroniczne w pytaniach i odpowiedziach. WNT, Warszawa, 1991.*
  - Conditions of the course acceptance/creditation:
 

*100% acceptance of laboratory classes*
- \* - depending on a system of studies