

# Advanced Applied Electronics

*It's all about Internet of Things*

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*Choose yourself and new technologies*



Wrocław University of Technology

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# AAE - *It's all about IoT*

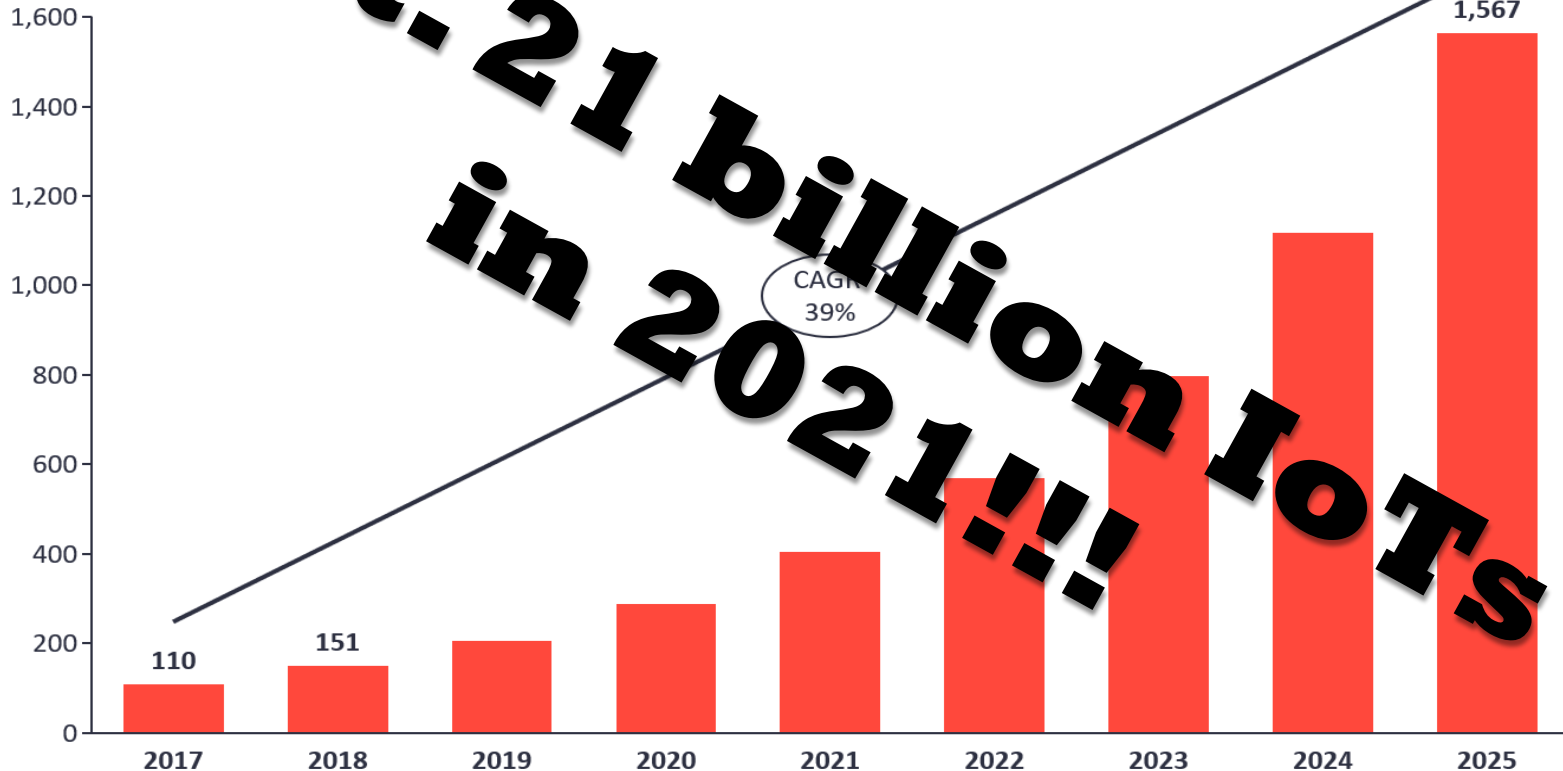
 IOT ANALYTICS

August 2018

Insights that empower you to understand IoT markets

## Global IoT Market Forecast

Global IoT Market in \$B



Note: Market defined as total spend of end-users on IoT solutions

Source: IoT Analytics Research 2018



IoT



MCU

Soft

PWR

Analog  
(RF)





# Facts about the specialization

- **Advanced Applied Electronics – M.Sc.**, specialization conducted entirely in English:
  - 3 semester
  - Between 20 and 30 students each year
  - better chances on the labour market
  - competitiveness on the European labour market
  - the ease of making contact:
    - more opportunities for foreign scholarships
    - contact with students from many countries during classes (Belgium, Greece, Turkey, Spain, Portugal, Ukraine, South Korea).
  - Easier academic career - English is a standard in today's science



# Facts about the specialization

- Objects oriented to practice:
  - Preparation for work in companies
  - Preparation for work *in research laboratories*
- Four basic groups of items:
  - Analogue and digital electronics
  - Optoelectronics
  - Signal processing
  - Programming



# Courses

h\sem	I	II	III
24	Optical Fibres and Optocommunication	DSP Controllers Architecture	Master Thesis
23			
22			
21			
20	Microcontrollers Programming	Hardware Programing	
19			
18			
17			
16	Computer Network and Systems	Lasers and Applications	
15			
14			
13	Numerical Algorithms	Analog Peripherals of Digital Systems	Optional courses
12			
11			
10			
9	Numerical methods in differential equations	Machine Learning Methods	
8			
7			
6			
5	Social Comunication	RF Circuits Design	New Approaches in Electronics and Photonics
4	Foreign language B2		
3	Foreign language		
2		Specialization seminar	Diploma seminar
1			



# Some diplomas subjects:

- IP Radio with Ethernet interface
- Comparison of signal processing efficiency of different DSP architectures
- High precision VCSEL laser based range finder
- CAN Open based sensors network
- Performance testing of symmetric key algorithms in the WolfSSL cryptographic library on the STM32F2 platform





# Thank you for the attention

- In case of questions, please contact:
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