

CZECH TECHNICAL

IN PRAGUE

#### FACULTY OF ELECTRICAL **ENGINEERING**

**DEPT. OF TELECOMMUNICATION ENGINEERING** 

**ITU Centre of Excellence** @ the Czech Technical **University in Prague** 

**Jaroslav Burcik** 

#### **Czech Technical University in Prague**

- Established 1707
- Edict of Joseph I, Holy Roman Emperor
- 8 Faculties
  - Electrical Engineering FEE-CTU (since 1950),
    ITU Academia Member of all sectors (since 2011)
  - Architecture
  - Biomedical Engineering
  - Civil Engineering
  - Information Technology
  - Mechanical Engineering
  - Nuclear Sciences and Physical Engineering
  - Transportation Sciences
- Approximately 21.300 students
- Best engineering School in Czech Rep.







### **Centre of Excellence at CTU**



#### **Our goals**

- Increase professionalism and raise awareness on cyber security
- Improve the environment for the promotion of cooperation between academia and the business sector

#### We offer

- Joint research projects
- Expert advisory
- Practice-oriented tailored courses in unique equipped laboratory

The centre is an academic member of Radiocommunication, Standardization and Development sector of the International Telecommunication Union (ITU).

## CTU ITU CoE

#### **Areas of focus**

- Cyber Security for Industry 4.0
- Cyber Security for SMEs
- Cyber Security in Health Care

#### Robot Industry 4.0 HMI Midustry 4.0 Midustry 4.0 France France Strate Totol Totol Monitoring Tool

#### **Target group**

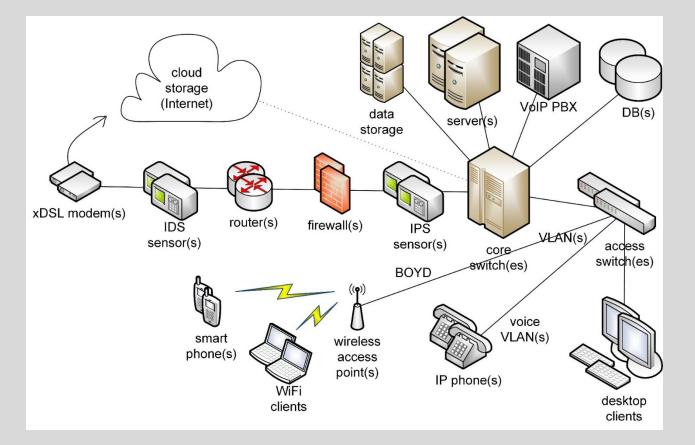
- Companies with focus on start-ups and SMEs
- Government
- Students esp. high school students

## Equipment

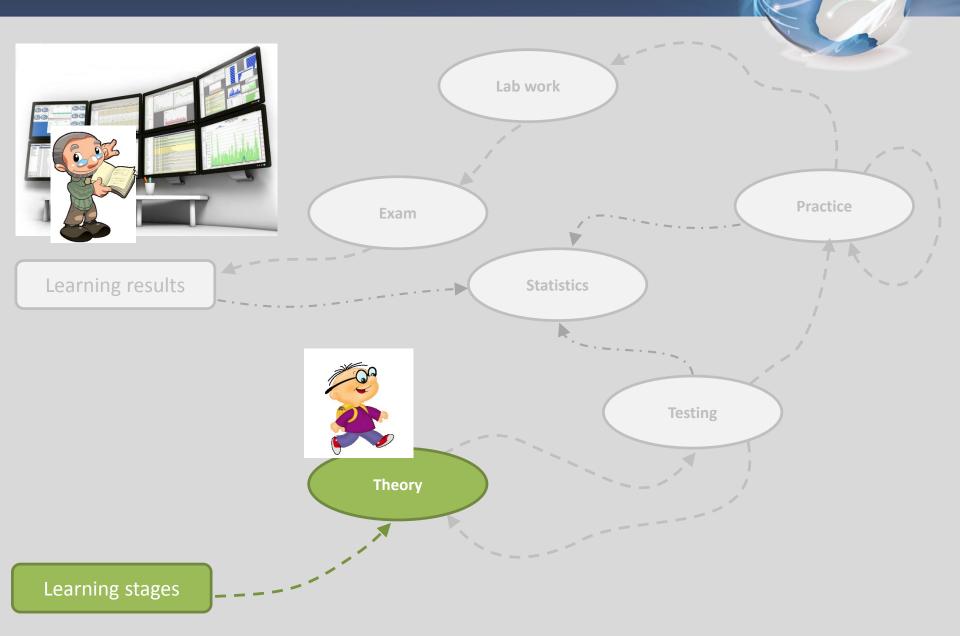


- Unique equipped laboratory
- Experienced lecturers from industry





### All in one platform



#### **CoE Activities**



- Focused on the general public to improve knowledge about selected aspect in cybersecurity
- Incentive lectures
  - Aimed to motivate high school students to study the cybersecurity topics in depth
- Practice-oriented courses
  - Expert level for business & government cooperation

### **Support Activities**

- Evening courses
  - Cybercafés
  - Open, free & everybody welcome
- Incentive lectures
  - Support activities for university high schools
  - Trainee programme for CTU students
  - Cybersecurity summer school





### **Professional development**

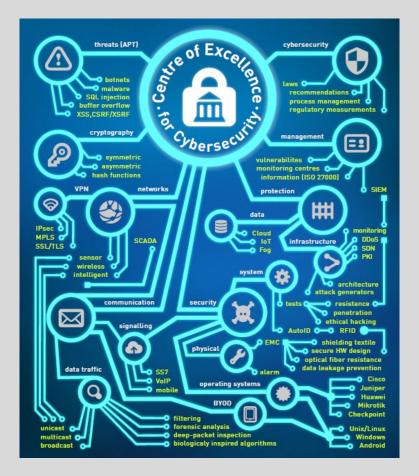
- Advisory in field of cybersecurity for university start-ups and SME companies founded by graduates
- Practice-oriented courses
  - Cyber Security Awareness for SMEs
  - Cyber Security Lifecycle of the New Millennium
  - Spectrum Management Training Programme



### **Expert advisory**

## Focused on cooperation with business sector in these technological areas

- Mobile Communications 4G/5G core networks
- Internet of Things and RFID
- Industrial Protocol and Applications
- ICT Systems Management



#### **Our another ITU activities**



# Faculty of Electrical Engineering of the Czech Technical University in Prague as an Academia member of all ITU sectors:

- Organized the Academia Meeting in Prague (BDT/ITU-D, April 2014)
- Collaboration with ITU-D under MoU (December 2015)
- Establish ITU Centrum of Excellences on Cyber Security for Europe (January 2015)
- Organized the Global Symposium on Small Satellite Regulation and Communication Systems (BR/ITU-R, March 2015)
- Prepare for the implementation of the ITU Academy Spectrum Management Training Programme (2016)

Special focused course under the ITU umbrella, offering students across the globe access to state of the art holistic SM training and forward looking professional vision

- 2 semesters (1 year)
- Combination of face-to-face (twice of each semester), remote teaching (Moodle, on-line consultations) and self-studying
- Module corresponds to
  - 4-5 weeks per module
  - 125 hours, 40 hours of classroom training
    - 30 hours of lectures
    - 10 hours of practical exercises
  - Assessment in the end of each module, internationally recognized ITU certification

#### Starting date: CTU Prague, February 2017



#### CoEs idea is great! It works!

#### Let's CoE work together more closely - common projects, personal exchanges etc...



#### Thank you for your attention

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