ITU Academy
E-learning Experiences
- The ITU Centre of Excellence Viewpoint

Prof. Dr. Toni Janevski

Faculty of Electrical Engineering and Information Technologies

Ss. Cyril and Methodius University, Skopje

Email: tonij@feit.ukim.edu.mk

ITU Academy web portal
http://academy.itu.int

ITU Academy URL

This event in Budapest

Global map of ITU CoEs

Here is given a link to upcoming ITU Academy trainings

https://academy.itu.int/index.php?lang=en

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empowering minds

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Our network of 30 Centres of Excellence is spread across the world.

ITU-Academia Partnership Meeting
Developing skills for the digital era
19-21 September 2017
Budapest, Hungary
More information

Regional workshop "Strengthening capacities in international Internet governance"
14-16 August 2017
Brasilia, Brazil
Visit the event's website

COURSES   Search: By Categories By Regions

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Capacity Building in a Changing ICT Environment 2017

New! - Capacity Building in a Changing ICT Environment 2017

MY COURSES

WHAT'S NEW

ITSO/ITU TRAINING
SATELLITE COMMUNICATIONS FOR AFRICAN COUNTRIES

ITSO/ITU Training on Satellite Communications for African...
ITSO/ITU Training on Satellite Communications for African countries ITSO, in collaboration with ITU,...

Enhancing access to submarine cables for Pacific Islands...

UPCOMING TRAININGS

11 Sep - 15 Sep   Licensing & Authorization : Policy Procedure...
This training aims at giving an overview of licensing and authorization of telecommunications servi...

17 Sep - 19 Sep   Spectrum Engineering Techniques
- Understanding technical aspects of signal identification, and noise and

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User identification in the ITU Academy

ITU Academy user account is uniquely identified by the user's email address.

ITU Academy course cover page

Title of the ITU Academy course.

Tutors and coordinators.

ITU Academy e-learning courses: Best experiences in period 2010-2013

ITU Academy e-learning course	Year	Enrolled participants	Participants that completed the course	Number of countries globally
Next Generation Networks - NGN	2010	77	**69**	**17**
NGN services VoIP and IPTV	2011	66	**59**	**20**
Next Generation Mobile and Wireless Networks	2011	100	**89**	**33**
Future Internet	2012	101	**82**	**39**
Mobile Broadband: LTE/LTE-Advanced, WiMAX and WLAN	2012	189	**144**	**44**
Broadband and Next Generation Networks	2013	150	**124**	**45**
4G Mobile and Future Internet	2013	149	**97**	**40**

ITU Academy e-learning courses: Best experiences in period 2014-2017

ITU Academy e-learning course	Year	Enrolled participants	Participants that completed the course	Number of countries globally
NGN, Future Networks and Cloud Computing	2014	130	82	44
Wireless and Mobile Broadband Internet	2014	215	131	50
Next Generation Broadband Internet Access	2015	139	86	40
Mobile Broadband	2015	157	77	36
Broadband Internet and Future Networks	2016	123	116	40
4G and Next Generation Mobile Internet	2016	73	65	36
NGN, cloud computing and ultra-broadband	2017	106	86	26

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Type of participants in ITU Academy e-learning courses

- Different types of participants follow a given e-learning course, and they are coming from different organizations, including:
    - National regulators
    - Government organizations and ministries
    - Network and service providers
    - Telecom and IT companies
    - Students from universities
    - Professors from academia and instructors from training centers
    - …and every individual which want to update their knowledge or have up-to-date information in a given field

- Different participants may have different interests and different focuses in a single ITU e-learning course, since most of them are professionals
    - Working in telecommunications/ICT or related fields

- Let see some feedback from participants regarding their benefits from ITU e-learning practices

ITU e-learning Feedback from Participants: Broadband Internet and Future Networks (2016)

- I am at a desk job and this course has certainly added to my knowledge on the latest technologies. I found the course to be very useful.
- One of the most areas that would be benefited is net neutrality issues.
- The course helps us to have a more comprehensive view of the evolution of the Internet and broadband networks and their potential use in sustainable cities.
- The course is relevant as it makes me understand better the world of ICT. This is an advantage as when am analysing the data from administration side (supply side) i understand better. It also helps me in writing ICT related papers.
- n/a
- Sure, My organization is a provider. This course has added to my knowledge and i has understood the overview of Broadband Internet and Future Networks.
- It will help me in analysing the ICT statistics and writing reports on the same better
-
- I work for the Turkish Regulatory Body (ICTA) and Training materials include up to date information. Very helpful for the regulation side of the sector.
- It helps my organisation through proper understating of new technologies. Planning benefits a lot.
- I'm in academic sector, the main benefit is in order to study the ultimate regulation on telecommunications technologies.
- The mindset of the participants is definitely changed and right now I see things in a different perspective. I realise that there is no other way into the future than plan for the Future Networks.

- It provides a good understanding of where the ICT industry is currently at and the future of it (which is closer than we think). It provides for greater appreciation of the subject and helps in preparing for it.
- It provides a general point of view on the emerging technologies.
- It will contribute towards my daily work and enhance my knowledge on future networks and where technology is heading to and what to expect.
- My organization benefit from this course in many aspects. First we need to build our capacity in the novel new areas of ICTs like OTT, IoT, NGN, 5G, etc... in terms of the technical and legal aspects with the new economy challenges that we will be facing. So sharing best practices by discussing with other people all around the world is a very good way that has been possible within the course earned by ITU Academy. I'm a professional of Telecommunication but this course helped me understand some new guidelines and business trends of the economy. Thanks to all of you ...
- The organization was excellent and this e-learning course was very informative, very well presented, plus enjoyable.

  Thanks for all.
- I am more enlightened.
  I will assist my organization to understand the Broadband and Future Networks trends so

Each ITU course has participants from regulators, operators, academic sector...

ITU e-learning Feedback from Participants:
4G and Next Generation Mobile Internet (2016)

In your opinion, how your organization benefiting from the knowledge and experience you acquired through this course? *Please explain*

- The mobile network operator where I work has just recently rolled out it's first LTE service. I believe that the knowledge acquired in this course will help to make better decisions during technical design, procurement, commissioning and troubleshooting of the LTE network. In summary, the things that I have learned from this course will help me to do my job better.

- I thing, the knowledge I acquired trough this course, will be useful in performance analysis of technical as well as business and regulation issues for 4G and next generation networks.

- I work at NTRA of Egypt , this course (material and interactions and discussions quizzes) are very useful for me and NTRA as a regulator (important knowledge, technical, administration) plus in my personal life.

- In my working domain it is necessary to understand the new technologies appearing in the mobile market. So the course covers this requirement.

- Show a certain level of interest in ITU courses.

- Being in charge of the regulatory and policy affairs in my organisation this course is relevant to my position and strenghened me to face regulatory and business challenges even technical aspects of 4G, 5G and Mobile Internet broadband.

- Let me know the origin and trends of the mobile network, characteristics and topologies. I will apply this knowledge for analysis and recomendations in my job.

- As an engineer with the national Telecom regulator, it is important to be on top of the current in next generations networks. I will now advice my entity on all technical issues of next generation mobile networks. I will also advice them on what to do as a regulator to prepare for the deployment of 5G networks.

- It will help to implement LTE into our network.

- More knowledge, better professional

- As an expert in Technical Directorate I think that every part of this course would be so helpfull for me in my work.

- Now that I have deeper knowledge in the area I could better see the real picture when preparing and assessing legal acts, solving questions at the NRI.

- In my particular case, I took the course to deepen knowledge in mobile networking issues in order to complement my knowledge because I am involved in virtualization technologies (NFV). Therefore, this would benefit my research for the doctorate.

- I work at Regulatory body and especially at IT unit so i must know these stuff clearly which the gave me. It will help in regulatory functions in my office

- The will benefit an increase in technical input due to increased knowledge

Each participant and organization has its specific benefit from a given ITU course.

ITU e-learning Feedback from Participants:
NGN, Cloud Computing and Ultra-Broadband (2017)

In your opinion, how your organization benefiting from the knowledge and experience you acquired through this course?, *Explain*

- We are public telecom operator and we follow requirements of our cotumer and markets.

- In my opinion i get many useful information and knowledge witch i can use to support my organization.

- Information is power. NGN is the future of the networking. If you are working in the networking and not be informed of its evolution, you will be exceeded in a short time. This technology goes at the speed of MACH. Networking is a dynamic technology.

- -

- The knowledge and experience I acquired through this course will help me for future work in my company especially in NGN environment.

- As a National Regulators, my entity needs to have vast knowledge and understanding in all forms of telecommunications. This will enable her to render sound decisions in regulating the telecommunications sectors properly.

- Since ICT Office is a national agency in implementing and regulatory entity in terms of ICT here in the Phlippines, this course definitely contributed a lot in terms of net technologies and the likes.

- This is good course, I need to share the NGN and Clouding computing. let org know about it

- In my opinion they will get some on one who can involve on the future networks design and recommendation. This course helps me to acquire this knowledge.

- As a regulatory body of Nepa,I have gain knowledge about How can correlate cloud computing and NGN in telecom indusrty.

- This training will allow me to improve the courses I taught already, including NGN. Cloud Computing and Mobile Cloud Computing are new acquisitions but very beneficial for my school

- I would be able to understand the new concepts in a better way and utilize the acquired knowledge.

- ..

- I will be usage the knowlegde gain during this training in my work and also will help desired colleages or others to understand the FN and cloud computing.

- After this course I know more about future network and this knowledge will definitely help me in my future work.

- I have new knowledge that I could put into practice in my various courses at our institute

- The knowledge about ICT trend is necessary for the employees to have self development and to gain important skills in their occupations.

- I am working in telco operator and we are faceing with this migration phase.

- It has give me much more insights into NGN in a very concise and comprehensive manner too.

> Each ITU course is global, reaching all regions and countries worldwide.

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Students at the Universities versus participants in the ITU Academy courses

- For students at the university there is more:
  - Theory
  - Analytical exercises
  - Lab exercises

- For participants in the ITU courses, typically employed professionals, the experience shows that ITU e-learning course is good to provide:
  - Less analytical approach with equations (since math is harder to learn on distance)
  - More interdisciplinary approach, such as **combination of the technology, business and regulation aspects**
    - Of course, there is needed knowledge in different fields to provide higher value into the contents and the course in general

Key element for success of ITU CoE:
Increase and maintain the appeal for trainings offered via the ITU Academy

- Main approach which brings success is:
    - To **continue the successful** programmes with updated curricula
    - To use **multiple delivery channels**: e-learning trainings, face-to-face, blended
    - To use ITU Academy as a medium for **capacity-building** of managers and engineers, but also other with **inter-disciplinary** interests in telecommunications/ICT areas
- To create and deliver well structured and well designed courses, considering the ITU focus areas:
    - For example, defined by the **World Telecommunication Development Conferences** (WTDC)
- To use already proven **successful practices** (where participants are satisfied) and to provide **consistency** in the courses delivery
    - Participants that are satisfied by a given course will join some of next ITU courses, and vice-versa
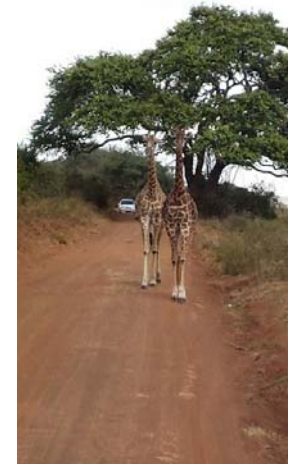
Face-to-face training delivery - Capacity building around the world

- Train the trainers for the ITU Academy in Nairobi in 2013
  - a great and important event for the Africa region to provide support for capacity building via the ITU Academy based on own experience
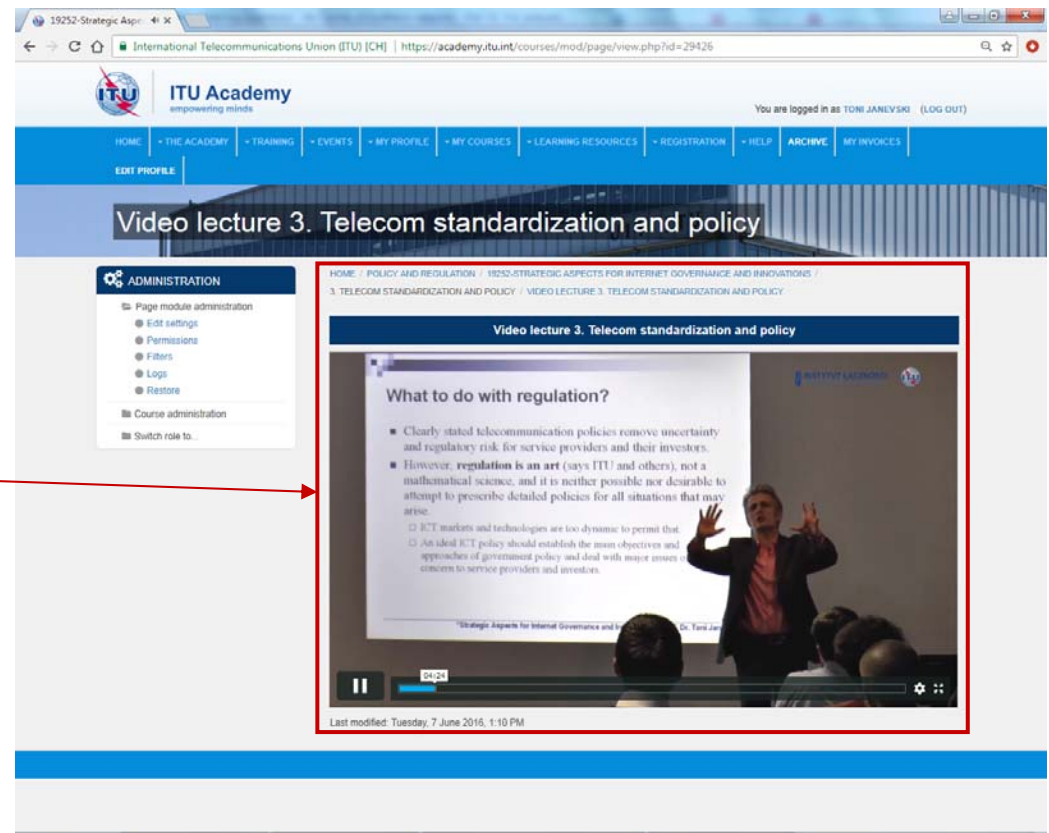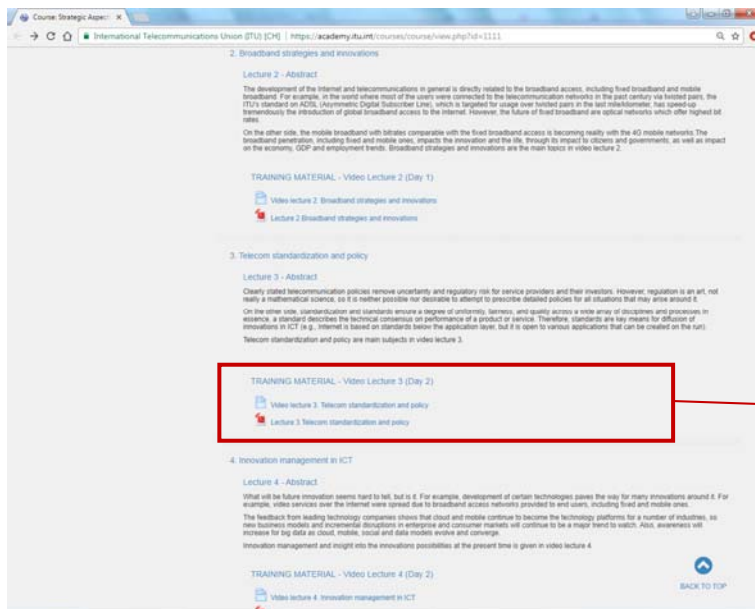

… and safari at the end

ITU CoEs collaboration: E-learning based on face-to-face training

- ITU face-to-face training (in Warsaw 2015) is video recorded and after the post-production it is used for ITU e-learning course on the ITU Academy in 2016.

Key element for success of ITU CoE: Creating excellent e-learning practices

- Best e-learning practices are created by evolution of courses and the e-learning process by:
  - Finding the most relevant **subject** areas/sub-areas
  - Preparing quality training **materials** in a timely manner
  - Structuring of courses and alignments to **learning objectives**
  - Providing **professional** and encouraging work
  - Improving the course **organization**
    - Having dedicated tutor **assistants** for longer e-learning courses
  - Setting a course scheme that fits participants needs and creates **high user experience**
  - **Focusing on students** (i.e., course participants) and what they need:
    - Organization and **coordination** before, during and after the course
    - **Quick response** on all queries on all issues (e.g., contents, administration, anything else)
    - **Good timing** of all events (e.g., modules, forums, quizzes)
    - **Consistency** in everything related to the e-learning course
  - Having **efficient administration** before and after the course

Key element for success of ITU CoE:
Applying academic standards to
ITU e-learning courses

- Working on the e-learning courses with **dedicated assistance**
  - For preparation and delivery of the training material
  - So, the tutor can render direct support to students in terms of discussions of the materials in dedicated forums on the course pages in the ITU Academy

- Having well **organized logistics** for all issues important for the course participants
  - Prior the course (for registration), during the course (for delivery of the contents) and after the course (for course evaluation and certification)

- **Evaluation** of the ITU courses
  - Use of **University academic standards** in undertaking assessments (one Quiz test per week, evaluating all answers in the Forums)
  - Required overall average success **grade of 60%** to obtain an **ITU certificate** after the course.
  - Use of received **Feedback** from the participants.

How to continue the ITU Academy success story?

- **ITU and Academia (Professors/Instructors/Experts) need:**
  - ☐ To provide **excellence of the training** (including organization, creation, coordination, delivery, and certification)
  - ☐ To provide diversity of ITU Academy trainings
    - ■ For **capacity building of all ages**, with focus to ICT professionals
  - ☐ To deliver information about a given ITU course to different parties (that is the course marketing)
  - ☐ To **complement university level education** on long terms
    - ■ This is crucial for the success

- **ITU Academy as a single web-based platform needs:**
  - ☐ To maintain **high reliability** (e.g., administrators' work)
  - ☐ To continue with the online and offline (with invoices) **payments** exist for course enrolments
  - ☐ To continue all **different tools** for courses delivery

Summary

- **ITU Academy** is an online self-learning e-learning platform:
  - ☐ It is an educational platform, aimed at integrating and providing education, training and information resources on Information and Communication Technologies (ICTs).

- **Training programmes** cover a wide range of ICT-related topics:
  - ☐ Ranging from programmes for government policy-makers and regulators, professional business-focused curricula for senior ICT executives and managers, to specialized programmes for technical and operational staff.

Summary

- Professors, tutors and experts (from **Academia**) need to:
    - ☐ Have **pedagogical, technical and administrative skills** for e-learning trainings via the ITU Academy;
    - ☐ Efficiently use the available **tools in the ITU Academy** including
        - Tools for course implementation, course delivery, course monitoring, as well as course evaluation.
    - ☐ **Deliver information** about the course to its contacts;
    - ☐ Provide **high quality training experience** on a given topic to the participants dispersed in space and time around the world
        - Because the ITU courses **reach globally**.