ITU Academy

E-learning Experiences

- The ITU Centre of Excellence Viewpoint

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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

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User identification in the ITU Academy

ITU Academy user account is uniquely identified by the user’s email address.
Title of the ITU Academy course.

Tutors and coordinators.
### ITU Academy e-learning courses: Best experiences in period 2010-2013

<table>
<thead>
<tr>
<th>ITU Academy e-learning course</th>
<th>Year</th>
<th>Enrolled participants</th>
<th>Participants that completed the course</th>
<th>Number of countries globally</th>
</tr>
</thead>
<tbody>
<tr>
<td>Next Generation Networks - NGN</td>
<td>2010</td>
<td>77</td>
<td>69</td>
<td>17</td>
</tr>
<tr>
<td>NGN services VoIP and IPTV</td>
<td>2011</td>
<td>66</td>
<td>59</td>
<td>20</td>
</tr>
<tr>
<td>Next Generation Mobile and Wireless Networks</td>
<td>2011</td>
<td>100</td>
<td>89</td>
<td>33</td>
</tr>
<tr>
<td>Future Internet</td>
<td>2012</td>
<td>101</td>
<td>82</td>
<td>39</td>
</tr>
<tr>
<td>Mobile Broadband: LTE/LTE-Advanced, WiMAX and WLAN</td>
<td>2012</td>
<td>189</td>
<td>144</td>
<td>44</td>
</tr>
<tr>
<td>Broadband and Next Generation Networks</td>
<td>2013</td>
<td>150</td>
<td>124</td>
<td>45</td>
</tr>
<tr>
<td>4G Mobile and Future Internet</td>
<td>2013</td>
<td>149</td>
<td>97</td>
<td>40</td>
</tr>
</tbody>
</table>
## ITU Academy e-learning courses: Best experiences in period 2014-2017

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

Each ITU course has participants from regulators, operators, academic sector...
Each participant and organization has its specific benefit from a given ITU course.

In your opinion, how your organization benefiting from the knowledge and experience you acquired through this course? Explain
- We are public telecom operators and we follow requirements of our customer and market.
- In my opinion I get many useful information and knowledge which 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 regulator, my entity needs to have vast knowledge and understanding in all forms of telecommunications. This will enable me 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 Philippines, this course definitely contributed a lot in terms of new 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 in the future networks design and recommendation. This course helps me to acquire this knowledge.

As a regulatory body of Nepal, I have gained knowledge about how can correlate cloud computing and NGN in telecom industry.
- 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 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 gain important skills in their occupations.
- I am working in telco operators and we are facing with this migration phase.
- It has given 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.
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**.