

# ITU Spectrum Management Training Program (SMTP)

Concept Presentation

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# Addressed problem

- Efficient running of Spectrum Management (SM) requires well educated professionals
- Today there are no formal holistic SM education programs, except some ad hoc commercial or public courses such as ITU BR seminars, USTTI
- Large administrations train SM staff by seconding them to experienced workers, but this offers narrowed vision and no formal quality check
- Many smaller administrations, especially in developing countries, do not have even such option, but must rely solely on ad hoc courses

# The solution

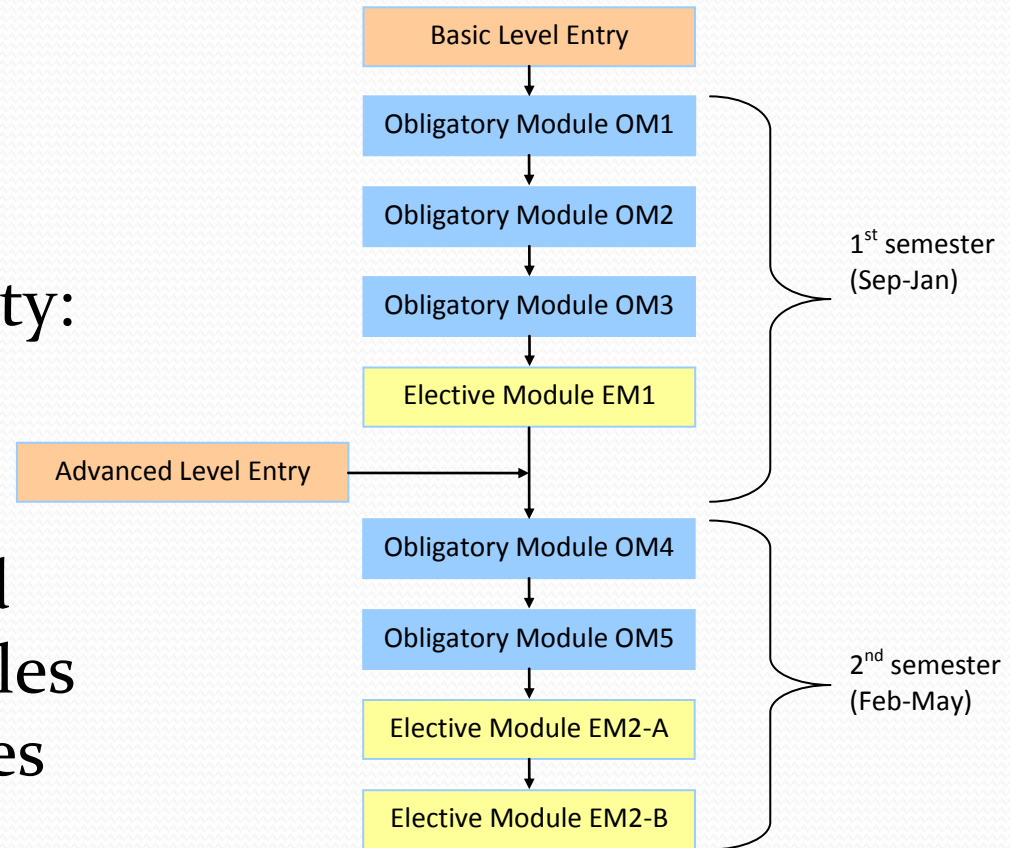
- ITU establishing Spectrum Management Training Program:
  - Unified course, offering students across the globe access to state-of-the-art holistic SM training and forward-looking professional vision
  - Formalised assessment ensuring certain unified quality of professional education
  - Certification to give international recognition, with possible option of university credits/diploma

# Benefits for ITU

- Preserving and spreading the wealth of SM knowledge accumulated in ITU (BR/BDT and ITU-R SG: staff's know-how and Reports/Recs)
- Additional facet to ITU's global leadership role as enabler and facilitator of ICT development
- Service to Member Administrations and Sector Members
- Course completion certificate as quality reference for candidates assessment in ITU and administrations' hiring processes

# The vision

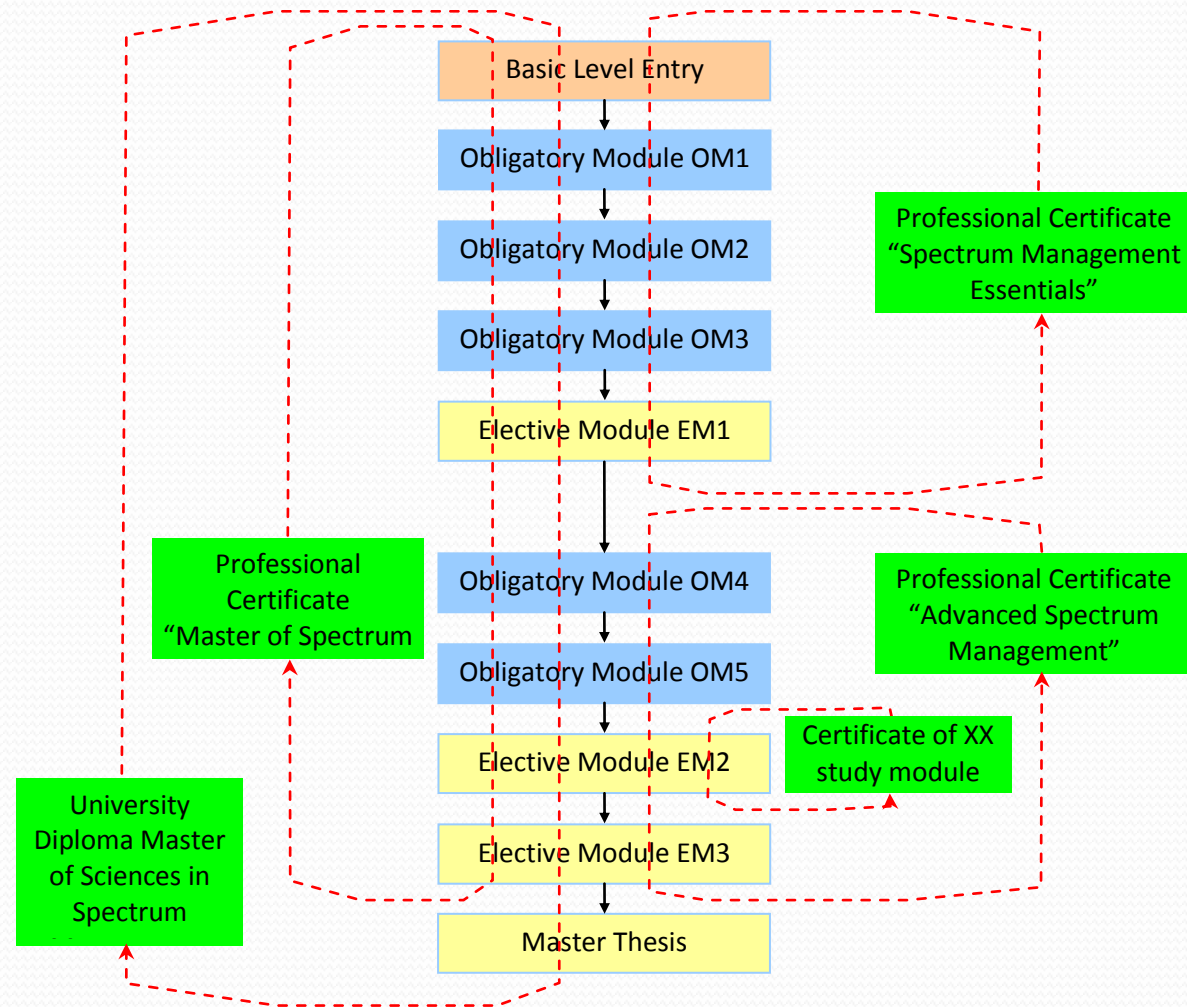
- Two entry levels
- Specialisation possibility:
  - Technical
  - Legal/economic
- Accordingly structured set of obligatory modules and specialised electives



# Initial composition of the course

- Obligatory modules:
  - “Legal Basis and Regulatory Framework of Spectrum Management”
  - “Spectrum Engineering Fundamentals”
  - “Wireless Telecommunications Technologies”
  - “Economic and Market Tools of Spectrum Management”
  - “Strategic Planning and Policies for Wireless Innovation”
- Electives:
  - “Spectrum Monitoring”
  - “Enforcement and Type Approval of Equipment”
  - “SM for Satellite Systems”
  - “SM for HF Systems, Science, Maritime and Amateur Services”
  - “SM for Aeronautical and Radio Determination Services and Military Systems”
  - “Computer-aided Spectrum Management”
  - “Advanced Spectrum Authorization Regimes”
  - “Socio-Economic Impact of Spectrum Regulation; Competition and Consumer Protection”
  - “Terrestrial TV Broadcasting Planning and Digital Transition”
  - “Opportunistic Spectrum Access and Cognitive Radio”
  - More may be added in the future

# Flexible certification routes





# First phase of implementation

- High level experts within the global SM community selected and had been working to develop the SMTP training materials
- Quality assurance mechanism through a combination of peer reviews by BR/BDT/Study Groups' experts as well as external experts
- Final materials are being passed through professional editor to ensure uniform quality of presentation/ language
- Clarifying the possibility and scope of partnership with universities and other institutions/companies



# Participation in Peer Review

- In order to guarantee the highest quality of developed materials and also to ensure a broad participatory approach, interested experts are invited to take part in the Peer Review Process of developed SMTP modules
- The experts willing to participate in the Peer Review Process will review and provide comments on:
  - the Power Point presentations
  - the list of questions (based on the Power Point presentations) and
  - the list of practical exercises (if applicable)
  - Once an expert submits his/her expression of interest, the relevant training materials will be provided to them

# Contact

- Those experts who wish to participate in the Peer Review Process of the SMTP are invited to contact by email the BDT (Mr. Mike Nxele, email: [mike.nxele@itu.int](mailto:mike.nxele@itu.int) with copy to Mrs. Yevgeniya Minkova Bicchetti, email: [yevgeniya.minkova@itu.int](mailto:yevgeniya.minkova@itu.int)), and indicate the module they are interested in reviewing. Further details about participation in this project will be provided by the BDT contact point

# Ultimate implementation options

1. International university Masters course:
  - Courses organized via collaboration of University/ies and ITU as well as ITU-R sector members
  - Diploma conferred by partner University/ies
2. International professional SM certificate:
  - Developed content becomes a guide for self-studies, supported by practical experience in administrations
  - ITU Academy administers the remote testing to established standard and issues ITU certificate to those who successfully passed the exams
3. Some combination of the above

# Conclusions

- The real weak point identified in supplying ITU Member Administrations with SM-educated personnel, which is unlikely to be resolved on national level, except in some very big countries
- ITU is at unique position to bridge this gap and further cement its position of global centre of SM innovation and know-how
- For more information see
  - <http://academy.itu.int/>
  - or contact
    - Mr Mike Nxele, email: [mike.nxele@itu.int](mailto:mike.nxele@itu.int)
    - Mr István Bozsóki, e-mail: [istvan.bozsoki@itu.int](mailto:istvan.bozsoki@itu.int)