



OAS Department of Scholarships and Training

Professional Development Course in Telecommunications

"New Technologies in Broadcasting"

- 1) **Venue:** Voice of America/International Broadcasting Bureau 330 C Street, SW, Washington, DC 20237.
- 2) **Offered by:** The Broadcasting Board of Governors, US International Broadcasting/Voice of America (VOA) in cooperation with the Institute of Electrical and Electronics Engineers Broadcast Technology Society (IEEE/BTS) under the auspices of the United States Telecommunications Training Institute (USTTI), Regional Training Center of the Inter-American Telecommunication Commission (CITEL).
- 3) **Coordinator:** Mr. Matthew Gebert, Curriculum Coordinator USTTI, 1150 Connecticut Avenue, NW #702. Washington, DC, 20036, USA. Phone: (202) 785-7373. Fax: (202) 785-1930. E-Mail: mgebert@ustti.org
- 4) **Modality:** On site course
- 5) **Starting and ending dates:** May 10 to 26, 2004,
May 7, orientation session.
Students are encouraged to attend the orientation session.
- 6) **Duration of the course:** Two and one-half (2.5) weeks.
- 7) **Language:** English.
- 8) **Objectives:**
 - **General** This course briefly review contemporary AM, FM and TV broadcasting and then delves into new emerging technologies of digital radio and television. Terrestrial, cable, satellite and Internet delivery systems are addressed. Topics include spectrum needs, propagation, coverage, antennas, transmitters, digital modulation, error correction, station automation, and station planning. Special sessions on broadcast management and elementary web page design are also included.
 - **Participant Learning Objectives:**
Upon completion of this course, the participants should be able to evaluate, advice and/or determine the technologies, systems and types of equipment best suited for their specific needs.

¹ The deadline for presentation of applications to the National Liaison Offices (ONE) differs from country to country and should therefore, be confirmed with the relevant ONE in the applicant's country of origin. ONEs are requested to submit application forms to the Department of Scholarships and Training in Washington, DC, by the deadline specified in the communication.

9) Program:

Monday	May 10
08:30-09:00	Registration
09:00-09:15	Welcome to International Broadcasting Bureau (IBB)
09:15-09:30	Orientation
09:30-11:00	Introductions and Course Overview
11:00-12:00	Visit Language Divisions
13:30-14:30	Public Tour VOA
14:30-16:00	Technical Tour VOA Studios and Control Areas
Tuesday	May 11
09:00-12:00	Introduction to Digital Audio, Radio and TV
13:00-14:30	Frequency Management, Allocation and Coordination (IBB)
14:30-16:00	Propagation and Coverage Models (IBB)
Wednesday	May 12
09:00-12:00	Radio and TV Station Design
13:00-16:00	Broadcast Antennas, Combiners and Related Systems
Thursday	May 13
09:00-12:00	Satellite and Terrestrial Digital Broadcasting (NAB)
13:00-16:00	AM, FM and TV Broadcast Transmitters (Harris Corporation)
Friday	May 14
09:00-12:00	Transmitters Continued (Harris Corporation)
13:00-16:00	Transmitters (Cont.)
Monday	May 17
09:00-12:00	New Technologies in Television (PBS)
13:00-16:00	In-Band-On-Channel (IBOC) Radio Systems ("Ibiquity Digital")
Tuesday	May 18
09:00-12:00	Cable Broadcasting Systems (National Cable and Telecommunications Association (NCTA))
13:00-16:00	Internet Broadcasting
Wednesday	May 19
09:00-12:00	Computer Applications in Broadcasting (IBB)
13:00-16:00	Website Design (IBB)
Thursday	May 20
10:30	Travel to WJLA Studios
11:00-13:00	Tour WJLA Studios (WJLA-Channel 7)
14:00-14:30	Travel to WJLA Transmitter Site
14:30-16:00	Tour WJLA Transmitter Site
Friday	May 21
09:00-09:30	Satellite Radio Broadcasting (IBB)
09:30	Travel to XM Radio
10:00-12:00	Tour XM Radio
12:00	Travel to WETA
13:30-14:00	Tour WETA TV Master Control
14:00-15:00	Tour WETA FM Radio Studios
15:00-16:00	Tour WETA TV Studios

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E-mail : portal@iacd.oas.org

Monday	May 24
09:00-12:00	Topics in Management
13:00-16:00	Topics in Management (Cont.)
Tuesday	May 25
09:00-12:00	Topics in Management (Cont.)
13:00-16:00	Topics in Management (Cont.)
Wednesday	May 26
09:00-10:30	Course Summary and Technical Resources
10:30-11:00	VOA Course Evaluation Session
11:00-12:00	USTTI Course Evaluation Session
12:00-12:30	Graduation Ceremonies

10) Methodology:

Lectures are given by engineering professionals from the IEEE Broadcast Technology Society, the US International Broadcasting Bureau and selected manufacturers of broadcast equipment. Field trips to several radio and TV stations in the Washington, DC metropolitan area provide insight into the latest developments and in some cases “all” digital facilities.

11) Requirements:

- a) Be a citizen or permanent resident of one of the OAS English-speaking Caribbean Member States (residents must send copy of valid visa).
- b) Participant profile: Engineers and engineering managers who are faced with planning, developing, expanding or upgrading broadcast facilities and infrastructures within their home countries. The focus is highly technical.
- c) Candidates must have at least three years’ experience in the sector.
- d) Fluency in English (if not the mother tongue, attested by supervisor in the supporting letter).
- e) Physical aptitude to complete the course activities (recent medical certificate).
- f) Present complete application by deadline established by the National Liaison Office (ONE). It is the responsibility of the candidate to find out the date established by the ONE in his/her country of residence.

12) Benefits:

The OAS/AICD will cover economy class, round trip airfare transportation from point of residence to study site. USTTI will cover registration fee, administrative fee, tuition, and study materials. In addition, USTTI will provide a total of US\$500.00 to assist the student with hotel expenses. Hotel is approximately \$50.00 per night for shared accommodations.

13) Scholarships recipient responsibilities:

Even though USTTI will provide a total of US\$500.00 to assist the student with hotel expenses, participants are responsible for their hotel and living expenses for the duration of their stay.

Upon notification of the scholarship award, candidates are requested to inform OAS/CITEL and USTTI of their acceptance ASAP. Unless such notification is received, their awards shall not be processed.

In the event that a candidate accepts the scholarship but cannot attend the course, for whatever reason, he/she must immediately advise OAS/CITEL and USTTI so that they can decide what action to take.

14) Certification:

CITEL/OAS, USTTI, and Voice of America will present the participants with a certificate upon their successful completion of the course.

15) Presentation of Candidates:

The official forms are available in all the OAS Offices of the General Secretariat in the Member States, also at the [ONE in all Member States](#) and through the "[Application Forms](#)" item of the [Educational Portal](#).

The ONE then will forward the complete applications to the Department of Scholarships and Training of the OAS, 1889 F Street, NW, Washington, DC 20006, USA, before the deadline for presentation of applications. Inquiries regarding the presentation of applications may be sent to portal@iacd.oas.org.

Regards,

Santos Mahung,
Director
Department of Scholarships and Training

C.c.: Coordinator
Permanent Observer Mission
File of the course