ABOUT ETV CENTRE

The ETV Centre was set up in the year 1985 for production of video programmes in various technical subjects and to popularize electronics media. It is well equipped with latest equipments. It has one of the best studios in Northern India and is deeply involved in Video Film Production and ICT based training activities. The centre conducts programmes and provides technical support to other departments to conduct technical and induction training programmes through ICT. Keeping in mind the need of hour, it is setting up milestones in education through ICT. The centre is evolving with the changing trends of education system in the global scenario. The centre is actively involved in conducting short term training programmes in the areas of Soft Computing using Open Source Softwares like SciLab, Open Source multimedia animation and graphics tools such as Art of Illusion, GIMP, Blender and many other free softwares like Google SketchUp, Pixlr, etc. In addition to short term courses, the centre is also offering 6 months and 1 year programmes like Certificate Course in Video Film and Animation Production and PG Diploma in Video Film and Animation Production respectively.

Industrial Training for B.Tech, M.Tech and Mass Communication students is also provided in the centre. Antenna Research Lab and Biomedical Research Lab are used extensively by M.Tech and PhD students for their research work. The centre had started using social media for training since 2012. Google Hangout which is a medium of web chat has been converted into interactive online classrooms by the continuous efforts of the centre. The centre also develops multimedia tools/products. SAMS (Smart Academic Management System), a Moodle based Learning Management System is a recent development of the ETV Centre.

The expertise of the faculty member and staff of the centre is utilized by various organizations to decide various technical aspects of studio and studio equipments. The centre is actively involved in e-content generation to contribute significantly to the country's mission in digitization of education.

Vision of the Department:

Become a centre of excellence in knowledge, innovative development, skill and ethical applications of multimedia technology

Mission of the Department:

- To impart quality education in multimedia technology
- To develop innovative tools/technology in multimedia
- To infuse scientific temper and ethics in the trainees and students and guide them to research in the emerging areas of multimedia technology.
- To develop committed and competent faculty and staff striving for excellence and research.
- To apply innovative tools/technology to infuse latest skills and confidence in learners
- To develop cooperative, collaborative and collective linkage with lead organizations for development of technical education and society.

Objectives of the Department:

- To develop e-content for digitization of technical education
- To provide knowhow on cost effective ICT support for implementation of digitization of education
- To offer innovative education and skill-training programmes on multimedia technology
- To prepare competent faculty and technical staff to take up networked based research for effective TEL.

The activities of the ETV Centre are:

(a) Video Lecture Production:

1. Civil Engineering
2. Electrical Engineering
3. Mechanical Engineering
4. Electronics and Communication Engineering
5. Applied Science
6. Education and Educational Technology
7. Entrepreneurship Development and Industrial Coordination
8. Rural Development
9. Educational Television
10. Media Centre
11. Computer Science and Engineering
12. General Category (including short duration films on social cause, moral values, educational awareness)

(b) Production of Technical Video Programme for other organisations.

This centre also develops technical video programmes for other organisation on consultancy basis for broadcasting purposes. Educational video programmes produced by this institute and by other organisations are duplicated to CD/DVDs and sold for use in engineering colleges, polytechnics and other institutes of higher learning. These prgorammes are very useful to supplement the class-room instruction in technical institutes.

(d) Hiring of Studio/Equipment/manpower

This centre has also been helping various production houses/TV channels in production of their television programmes by allowing them to use the studio facilities/equipment and manpower for production of their video programmes on hire-charge-basis

(e) Broadcasting of technical education Programmes for Gyan Darshan Channel

Since 26.01.2001, ETV Centre of this institute has been selected by ministry of Human Resource Development as nodal centre for broadcasting of technical programmes produced by the four Technical Teachers' Training Institutes in India from Gyan Darshan channel, Educational technical Programmes produced by these institutes are being broadcasted from Gyan Darshan Channel in 2 slots of half an hour each daily at 7.45 am and 2.30 pm for use by the teachers and students of various technical institutes in the country.

(f) Gyanvani Radio FM Channel (105.6 MHz)

Gyanvani is broadcasted from the institute in two slots, ie. 6 am to 10 am and 6 pm to 10 pm. It is an educational Radio Channel.

Facilities

a) TV Studio (Main Studio)

The spacious main TV studio 54ft x 40ft x 32ft (16m x 12m x 9m) has arrangement of 132 lights operated through remote control hosting system. the studio is centrally air-conditioned and is 100% acoustically treated. It is a boradcast standard TV studio with sound locking entries and has separate PCR, ACR, LCR equipped with 3 CCD type multi-camera system with CCU, one unit of Tapeless Model 1600 HD-VTR and one unit of DVCAM recorder and 12 channel Digital Audio Mixer.

b) Mini Studio

The Mini Studio is also well equipped with all the recording facilities like 3 CCD professional HD Camcorder PMW-EX3, Audio mixer, Cool Lights, DataVideo SE-800 Audio/Video Mixer, Projector, Microphones (Tube type and Lepal), UPS-3KVA, Light Control Room, etc.

c) Outdoor Recording Unit - ENG

There are two separate units in which each unit comprises of 3 CCD professional HD Camcorders PMW-EX3, wireless microphone –EW 100 ENG and Lavalier Microphone, Lighting portapack, Colour Monitors and other related accessories.

d) Editing System

2 Final Cut Pro, 1 Velocity Quattrus Non Linear Editing System.

e) Video Library

The air-conditioned video library has a collection of more than 1200 files in Beta, DVDs and CDs for programme exchange and video film production.

e) Maintenance of Video Equipment

The maintenance of laboratory is equipped with facilities to take care of the routine maintenance and repair of Audio Video equipment.

f) Antenna Measurement Laboratory

The laboratory is well equipped with equipments like synthesize signal generator, power meter, site analyzer, spectrum analyzer, microwave benches and radiation pattern measurement setup. The antenna laboratory with the VNA of ECE Department is capable of offering measurement facilities up to 20 GHz.

g) Antenna Simulation Laboratory

The antenna simulation lab has HFSS, IE3D and Fidelity which are extensively used by B.Tech trainees, M.Tech/M.E and PhD students.

h) Bio-electromagnetics Laboratory

The bio-electromagnetics lab of this centre is equipped with ECG and EEG machines to support studies on RF interaction with heart and brain otherwise human as a whole.

Laboratories

1. Main Studio
2. Audio and Video Control Room
3. Lighting Room
4. Mini Studio and Control Room
5. Antenna Measurement Lab
6. ENG Lab
7. Antenna Simulation Lab
8. Bio-electromagnetics Lab
9. Non Linear Editing Lab (Post Production Lab)
10. Conversion Lab for Gyan Darshan
11. Animation and Graphics Lab
12. E-Content Generation
13. Server and Video Streaming Room

MINI Studio

MAIN Studio

Lighting Room

Antenna Measurement Lab
Site Analyzer
RF Signal Generator
Spectrum Analyzer
IE3D Software
RF Power Meter
HFSS

Video Conversion Lab
for
Gyan Darshan

Video Library

Video Control Room