

**CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY  
(AUTONOMOUS), HYDERABAD-75**

***4.3.4: Institution has Facilities for e-content development***

*Facilities available for e-content development:*

1. *Media centre*
2. *Audio visual centre,*
3. *Lecture Capturing System(LCS)*
4. *Mixing equipment and software for editing*

Answer: All

**Table 1:** Table of Contents

<b>Sno.</b>	<b>Description</b>	<b>Page no.</b>	<b>link</b>
1	Purchase Orders and Invoices	2	<a href="#">Click here</a>
2	Media Centre	7	<a href="#">Click here</a>
3	Audio Visual Centre	8	<a href="#">Click here</a>
4	e-Learning Center	9	<a href="#">Click here</a>
5	Lecture Capturing System	10	<a href="#">Click here</a>
6	Mixing Equipment and Editing SW	10	<a href="#">Click here</a>
7	LMS and e-Content -AWS S3	13-15	<a href="#">Click here</a>
8	IT Facilities	16	<a href="#">Click here</a>

**POS and Invoices for LCS, Video Recoding Camera and other Facilities**

CHAITANYA BHARATHI  
INSTITUTE OF TECHNOLOGY (A)

CBIT/PSD/CSE/65/2021-22

Date: 23.11.2021.

**PURCHASE ORDER**

To,  
M/s. S&M Electronics  
1-2-234/13 fl-f4 Aravind Nagar,  
Domalguda, Hyderabad - 500029  
Ph:9100957937

Sir,

Sub: - CBIT – Procurement of Video Conferencing Equipment in Conference Hall – Reg.  
Ref: - Your Quotation No. cbit/21/9/1 dated 21.09.2021.  
Minutes of the 21<sup>st</sup> D&P Meeting held on 15.11.2021.

\*\*\*

With reference to your quotation cited above and based on further negotiations held on 15.11.2021, we are pleased to place our order for Procurement of the following Video Conferencing Equipment for Conference Hall of CBIT, as per terms and conditions given hereunder:

S.No.	Specification	Qty	Unit Price	Net Price
1	Logitech Rally System 4k camera, rally speaker, rally mic each 1no.	1	224050	224050
2	Rally Expansion Mic	1-pair	32213	32213
3	Rally Mounting Kit	1	13908	13908
4	Installation Charges		2500	2500
	<b>Total Rs</b>			<b>2,72,671</b>
	<b>Discount - 2%</b>			<b>5,453</b>
	<b>Sum Total</b>			<b>2,67,218</b>
	<b>GST @ 18%</b>			<b>48,100</b>
	<b>Grand Total</b>			<b>3,15,318</b>

**Terms and Conditions:**

1. Delivery at CBIT, Gandipet, Immediately.
2. Material found defective / unserviceable or which do not conform to our specifications will be returned to you at your cost.
3. Payment will be made through crossed Cheque after delivery, successful installation and proper working of Video Conferencing Equipment along with bills in triplicate.
4. Court Jurisdiction at Hyderabad.

**Note:** Our GST No. 36AABTC1906A1ZG

For Chaitanya Bharathi Institute of Technology

PRESIDENT

Chaitanya Bharathi Institute of Technology (A)  
Chaitanya Bharathi (PO), Kokepet (V), Gandipet (M),  
Bhadrachalam District, Hyderabad - 500 075, Telangana, India



## CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

CBIT/PSD/CSE/ 34 /2020-21

Date: 26.11.2020

### PURCHASE ORDER

To,  
M/s. Care Computer Services  
84-A,#203,Avula Apartment,  
Vengal Rao Nagar,Hyderabad-500038  
Ph: 9494994999  
Sir,

Sub:- CBIT – Procurement of HP Webcams & Headsets– Reg .  
Ref:- Your Quotation No. CQ/1454, dated: 20.11.2020.

\* \* \*

With reference to our Quotation cited above, and based on further negotiations we had with you on 26.11.2020, we are pleased to place our order for procurement of following HP Webcams & Headsets for CBIT, as per terms and conditions given hereunder:

Sl.No.	Item Description	Qty	Unit price	Total Price
1	HP w300 Webcam 1080p 30fps high resolution, UVC plug and play 72 degrees wide angle view, up-down adjustable swivel 207 degrees adjustable, adjustable clip support tripod, Digital microphone	250	2,936	7,34,000
2	HP B4B09A Headphones with Mic	400	540	2,16,000
	Sub-total			9,50,000
	GST - 18%			1,71,000
	<b>TOTAL</b>			<b>11,21,000</b>

#### Terms and Conditions:

1. Delivery at CBIT, Gandipet Immediately.
2. Material found defective / unserviceable or which do not conform to our specifications will be returned to you at your cost.
3. Payment will be made through crossed Cheque after delivery and certification by the HOD, CSE along with bills in triplicate.
4. Warranty: One year warranty.
5. Court Jurisdiction at Hyderabad.

**Note:** Our GST No. 36AABTC1906A1ZG

For Chaitanya Bharathi Institute of Technology

*M. Lakshmi*  
PRESIDENT

#### Chaitanya Bharathi Institute of Technology (A)

Chaitanya Bharathi (PO), Kokapet (V), Gandipet (M),  
Ranga Reddy District, Hyderabad - 500 075, Telangana, India  
040-24193276, 79, 80  
principal@cbit.ac.in www.cbit.ac.in





## Tax Invoice

<b>Care Computer Services</b> 84-A, G2, Avula Apartments Vengal Rao Nagar, SR Nagar Hyderabad - 500038 Ph: 040-40024999, Mob: 949 499 4999 GSTIN/UIN: 36ARRPM1221F1ZX State Name : Telangana, Code : 36 E-Mail : satya@carecs.in		Invoice No. e-Way Bill No. Dated <b>CS/285/20-21</b> <b>28-Nov-2020</b>	
Buyer <b>Chaitanya Bharathi Institute of Technology</b> Gandipet, Hyderabad GSTIN/UIN : 36AABTC1906A1ZG PAN/IT No : State Name : Telangana, Code : 36		Delivery Note Supplier's Ref. Other Reference(s) <b>285</b>	
		Buyer's Order No. Dated <b>CBIT/PSD/CSE/34/2020-21</b> <b>26-Nov-2020</b>	
		Despatch Document No. Delivery Note Date	
		Despatched through Destination	

SI No.	Description of Goods	HSN/SAC	GST Rate	Quantity	Rate	per	Amount
1	HP W300 WEBCAMERA	8525	18 %	250 Nos	2,936.00	Nos	7,34,000.00
2	HP Headset	8518	18 %	400 Nos	540.00	Nos	2,16,000.00
							9,50,000.00
							85,500.00
							85,500.00
Total							650 Nos ₹ 11,21,000.00

Amount Chargeable (in words) **INR Eleven Lakh Twenty One Thousand Only** E. & O.E

Taxable Value	Central Tax		State Tax		Total Tax Amount
	Rate	Amount	Rate	Amount	
9,50,000.00	9%	85,500.00	9%	85,500.00	1,71,000.00
<b>Total: 9,50,000.00</b>		<b>85,500.00</b>		<b>85,500.00</b>	<b>1,71,000.00</b>

Tax Amount (in words) : **INR One Lakh Seventy One Thousand Only**

Company's PAN : **ARRPM1221F**

**Declaration**

- Goods once sold cannot be taken back.
- No warranty on adaptors, cables, earphone, other accessories & consumables products etc.
- Warranty on all the parts or equipment's is as per manufacturer policy and shall be directly provided by manufacturer only.
- Any Deviations in Proforma Invoice / Tax Invoice should be informed within 72hrs to our E-Mail ID.
- Payment by A/C Payee Cheque/DD/NEFT in Favour of "Care Computer Services".
- Bank Details: A/c No. 50200039605492, IFSC. HDFC0004348, HDFC Bank, Kalyan Nagar, Hyderabad.
- Interest at 24 % P.A. will be applicable for any delay in the payments beyond the credit period provided.

Customer's Seal and Signature

for Care Computer Services  
Authorized Signatory

This is a Computer Generated Invoice



## CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY (A)

CBIT/PSD/ 166 /2019-20

### PURCHASE ORDER

Date: 02.03.2020

To,

M/s. Nisarga Information Technology Solutions Pvt. Ltd.

3<sup>rd</sup> Floor, Repunjaya Building,

Plot No. 1024, Madhapur,

Hyderabad - 500039, Ph: 9100921096

Sir,

Sub:- Procurement of Live Streaming Camera & Auxiliary Cables for CBIT - Reg.  
Ref:- Your Quotation dated 12.02.2020.

\* \* \*

With reference to your quotation cited above, and based on further negotiations held on 25.02.2020, we are pleased to place our order for Procurement of following Live Streaming Camera & Auxiliary Cables for CBIT, as per terms and conditions given hereunder:

S.No	Item Description	Qty	Unit Price in Rs.	Total Amount in Rs.
1	Logitech PTZ Pro 2 Camera	1	62,000	62,000
2	Audio - in and Audio - out Connect from Computer to audio Mixer	2	1,100	2,200
	Sub - total			64,200
	GST - 18%			11,556
	<b>TOTAL</b>			<b>75,756</b>

#### Terms and Conditions:

1. Delivery at CBIT, Gandipet Immediately.
2. Material found defective / unserviceable or which do not conform to our specifications will be returned to you at your cost.
3. Payment will be made through crossed Cheque after delivery and receipt of material in good Condition along with bills in triplicate.
4. Warranty Two years Warranty on Logitech PTZ PRO 2 Camera.
5. Court Jurisdiction at Hyderabad.

**Note:** Our GST No. 36AABTC1906A1ZG

For Chaitanya Bharathi Institute of Technology

*(Signature)*  
(Dr.P. Ravinder Reddy)  
PRINCIPAL

*(Signature)*  
02/02/2020

Copy to:

1. The HOD, CSE
2. Accounts Section
3. Master File

Chaitanya Bharathi Institute of Technology (A)

Chaitanya Bharathi (PO), Kokapet (M), Gandipet (M),  
Ranga Reddy District, Hyderabad - 500 075, Telangana, India

040-24199276, 79, 80

principal@cbit.ac.in • www.cbit.ac.in





## 4.3.4 Media Center Facilities

### GST INVOICE CUM DELIVERY CHALLAN (DUPLICATE FOR TRANSPORTER)

<b>Nisarga Information Technology Solutions Pvt Ltd</b> Survey 11/32, Plot No. 1024, 3rd Floor, Repunjaya Building, Khanameti, Gurukul Trust, Madhapur, Hyderabad, GSTIN/UIN: 36AAECN2283R1ZU State Name : Telangana, Code : 36 CIN: U72900AP2012PTC085075 Contact : +91 9030064806 E-Mail : accounts@nisargate.com www.nisargate.com		Invoice No. <b>NITS-1920-H-0814</b>	Dated <b>6-Mar-2020</b>
		Delivery Note	Mode/Terms of Payment <b>NEFT</b>
<b>Consignee</b> <b>Chaitanya Bharathi Intitute Of Technology</b> CBIT Campus,Kokapet (V), Gandipet Mandal, Ranga Reddy (Dt),Hyderabad. GSTIN/UIN : 36AABTC1906A1ZG State Name : Telangana, Code : 36		Supplier's Ref. <b>0814</b>	Other Reference(s)
		Buyer's Order No. <b>CBIT/PSD/166/2019-20</b>	Dated <b>2-Mar-2020</b>
<b>Buyer (if other than consignee)</b> <b>Chaitanya Bharathi Intitute Of Technology</b> CBIT Campus,Kokapet (V), Gandipet Mandal, Ranga Reddy (Dt),Hyderabad. State Name : Telangana, Code : 36		Despatch Document No.	Delivery Note Date
		Despatched through	Destination
Contact person : Vasavi Contact : 040-24193276, 8309952059 E-Mail : principal@cbit.ac.in		Terms of Delivery	

SI No.	Description of Goods	HSN/SAC	GST Rate	Quantity	Rate	per	Disc. %	Amount
1	<b>Logitech PTZ PRO2 Web Camera</b> 2 Year Hardware Warranty SI No :- 1938LZ50PPA9	85258090	18 %	1 Nos	62,000.00	Nos		62,000.00
	<b>Stereo to Mono Cable 10 Mtrs</b>	8544	18 %	2 Nos	1,100.00	Nos		2,200.00
								64,200.00
								5,778.00
								5,778.00
	<b>SGST</b>							
	<b>CGST</b>							
	<b>Total</b>			<b>3 Nos</b>				<b>₹ 75,756.00</b>

Amount Chargeable (in words) **₹ Seventy Five Thousand Seven Hundred Fifty Six Only**  
**E. & O.E**

HSN/SAC	Taxable Value	Central Tax		State Tax		Total Tax Amount
		Rate	Amount	Rate	Amount	
85258090	62,000.00	9%	5,580.00	9%	5,580.00	11,160.00
8544	2,200.00	9%	198.00	9%	198.00	396.00
	<b>Total</b>		<b>5,778.00</b>		<b>5,778.00</b>	<b>11,556.00</b>

Tax Amount (in words) : **Inr Eleven Thousand Five Hundred Fifty Six Only**

**Terms & Conditions:-**  
 1. Goods once sold cannot be taken back or exchanged.  
 2. Our responsibility ceases when goods leave our godown.  
 3. Payment must be made within 10 days from the date of invoice.  
 4. Interest @ 24% per annum will be charged for delayed payment.  
 5. Packing and Forwarding Charges Extra

Company's PAN : **AAECN2283R**

Company's Bank Details  
 Bank Name : **HDFC Bank**  
 A/c No. : **60200009077661**  
 Branch & IFS Code : **Cyber Towers, Hyderabad & HDFC0000545**  
 for Nisarga Information Technology Solutions Pvt Ltd

Customer's Seal and Signature

SUBJECT TO HYDERABAD JURISDICTION

This is a Computer Generated Invoice



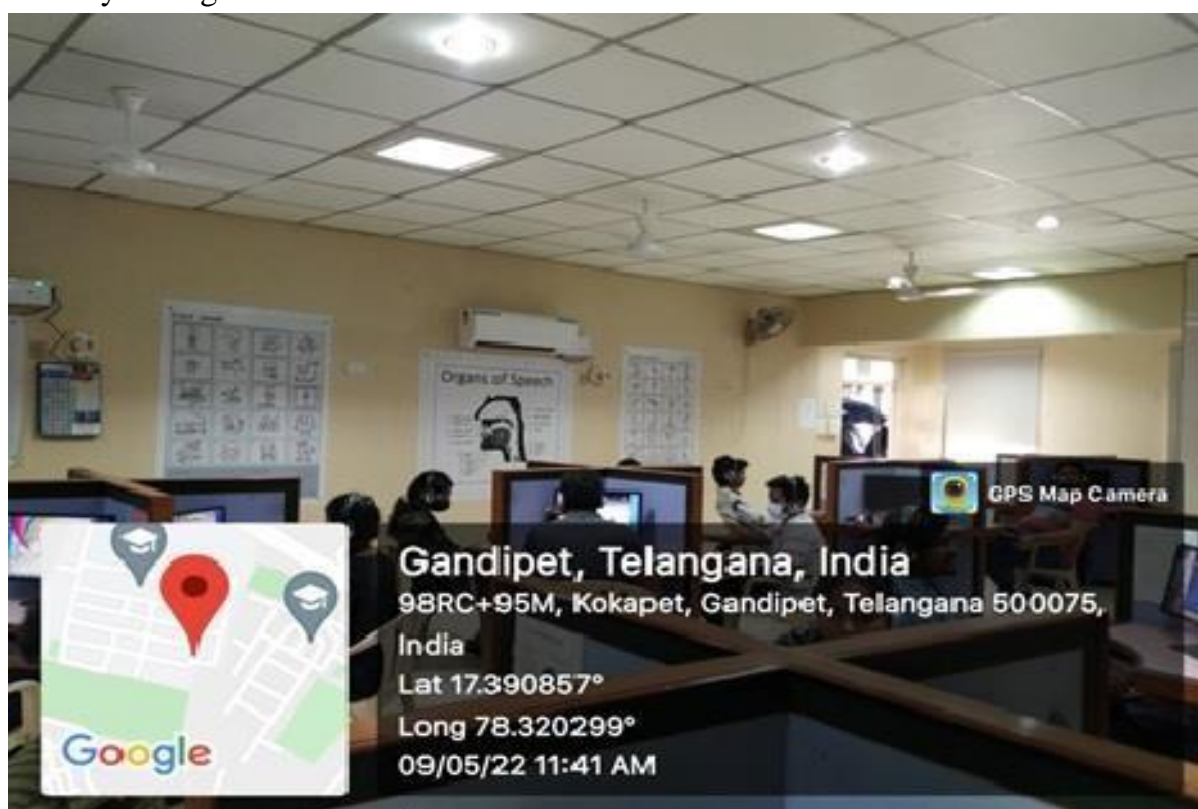
**1. Media Centre:** CBIT Media Centre is a notable initiative launched by the institute in 2018 to capture the indelible moments of the institute and showcase them to the global community. It runs under the aegis of Humanities, and MCA departments. The members of this cell are PRO, WBC coordinator, coordinators of Chaya, Photography, and Literary clubs. It acts as the nodal point for collecting disseminating news about the events happening in the instituteto Media sources. The main objective of the Media Center is to document in-house and external events to create a significant digital presence for the college on social media. It also records and manages the events, guest lectures and seminar from all the departments of the College, serves as the liaison between the institute and the consultants of the Social Media Management Team to enable them to publish it on the various social media platforms to ensure global reach for the college.

All the activities are done by students of the institute under the guidance of various clubs and departmental coordinators. The main role of the center is as follows: The Media Center takes care of the following activities:

- Be single point contact for the media to receive public information from the college
- Collect all the news of the events in the college.
- To archive the media coverage of the college activities/events/notifications
- Handles the photography and video editing for all major programs
- Media center equipment office is available for students, faculty and staff to check out cameras, mics, audio recorders, lights.
- Media Center helps not only students working on class projects but anyone who needs assistance starting a project.
- It is responsible for the Social Media Management and also to bring out the institute Newsletter
- It manages the institute's YouTube channel for events and hosts all the webinars and live streams of convocations and other significant events.
- Extensive press coverage for all the events on the campus, and the reports are shared with all the leading newspapers.
- Coordinating with IQAC in assisting with all the NAAC related assignments, e-content development, uploading on the web portal for the benefit of the students
- Encouraging students to become reporters, photographers, and video editors by giving them hands-on training, thereby creating job opportunities for the students.

For details please visit at: [https://www.cbit.ac.in/current\\_students/media-center/](https://www.cbit.ac.in/current_students/media-center/)

**2. Audio Visual Centre:** English Department also offers a wide range of learning techniques that aim to hone the English language skills of students. The two centres, under the Audio-Visual Centre are the CALL and ISL. The Computer-Assisted Language Learning or the CALL strives to bridge the digital divide by providing all of the students with equal access to technology-aided education. The Interactive skills learning (ISL) attempts to sharpen certain skills of students through activities such as group discussions, role-play activities, and the like. The Audio- Visual centre ensures that every student, irrespective of their background, is treated equally in terms of the equipment and learning techniques that they have access to, making the entire class subject to the good outcomes of the faculty's hard work. The students are provided with accent neutralization training, a deeper understanding of phonetics, and several other real-life skills like interview and presentation skills. The lessons are not limited to merely theoretical jargon; the students are encouraged to practically display and improve their skills by taking part in group discussions, putting up skits that involve role-playing, and making presentations. The takeaways that the students receive from these activities benefit them greatly in terms of placements and competitive exams. The final objective is to mold these students into confident orators, writers, and leaders. They are able to transmute these skills into real-life skills making them a lot more confident in the corporate fields, their areas of work, interpersonal communication, as well as day to day communication. These activities aim to improve the students' fluency in the English language and ensure that they graduate with the confidence they require to communicate in this day and age.



**Audio Visual Lab**





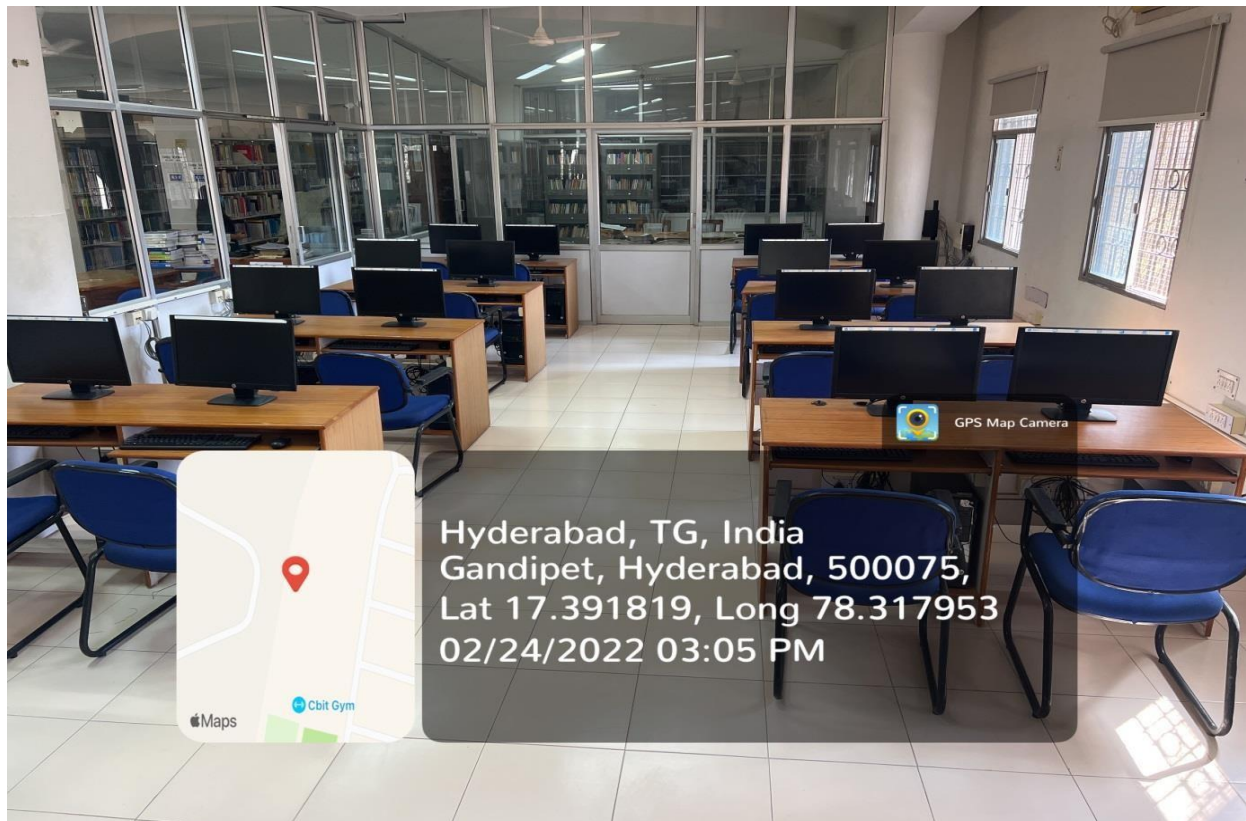
#### Interactive Communication Skills

### 3. e-Learning Resource Centre :

The institute Central Library functions as the primary information resource centre, a repository of all printed and e-resources for teaching and research activities at the Institute. Apart from textbooks and recommended reading material prescribed for each course offered at the institute it has established an exclusive Audio / Video / E.Learaning Resource Centre.

This centre is housed on the first floor of the Library & information centre in a separate enclosure in the reference section. This centre is having 30 Computers (20 HP i-7 Systems with 21 inch LED monitors + 10 Dell Systems) with an audio facility (headphones) . Users can use these computers to access available resources which include CDs/ DVDs, e-books, e-journals, e-learning materials include CDs/DVDs and Online e-lectures such as NPTEL, MIT available over the internet. The following are the some of the online resources:

- Swayam Online Lectures
- NPTEL Online Lectures
- MIT Open Courseware
- Engineering for Change Online Academy. ...
- Open Courseware Consortium. ...
- Carnegie Mellon University's Open Learning Initiative. ...
- Open Yale Courses, Stanford on iTunes U. ...
- The Open University. ...
- Udemy. ...
- Khan Academy etc..



### e-Learning Resource Centre

#### 4. Lecture Capturing System (LCS):

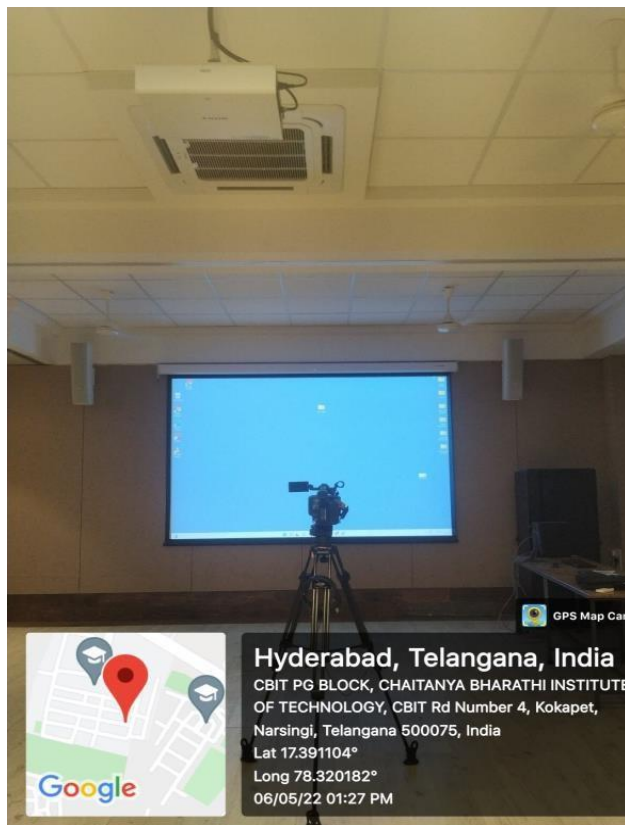
- Institute provided Desktop/Laptop, Headsets and Webcams for all the faculty to capture the Lectures and generate e-content.
- Institute subscribed Webex Education bundle, Microsoft teams for Videoconferencing facility for online classes and recording.
- Installed open source tools including Open Broadcast Studio (OBS) to record, streaming and OpenShot, Shotcut, Audacity for video/audio editing.
- Staff use OpenBoard/ Xournal/ Flathu as interactive board during the lecture

#### 5. Mixing equipment and software: CBIT has installed open source software for editing the video lectures.

1. **Functional editing setup** : Pro Pentium Computer supporting 4K animation/ rendering
2. **Animation / Graphics workstations:** Sennheiser Wireless System Lapel Microphone Set ( made in Germany) Graphics card: 6GB Nvidia GeForce GTX 1660, SUPER (made in US), Sound: Audio Mixing Console Yamaha MG06
3. **E-Content Integration Workstation:** AMD Ryzen 7, 2700X Desktop, 8 cores up to 4.3 GHz, 20MB Cache AM4 socket (made in US), ASUS B450 AMD Ryzen motherboard
4. **Mixing Software:** Openshot, Shortcut, Blender, KendenLive.



#### 4.3.4 Media Center Facilities



**Video Lecture Recording Equipment**



**Digital Studio- Sample Lecture Recording**



**Yamaha MG 12XU Mixer**

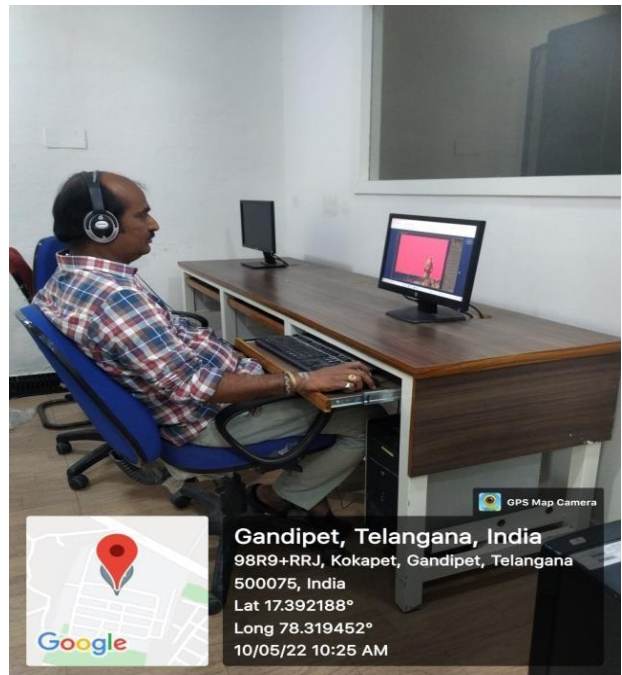


**QSC GX5 Power Amplifier**





**Openshot Video Editing Software I/F**



**Multimedia Processing**

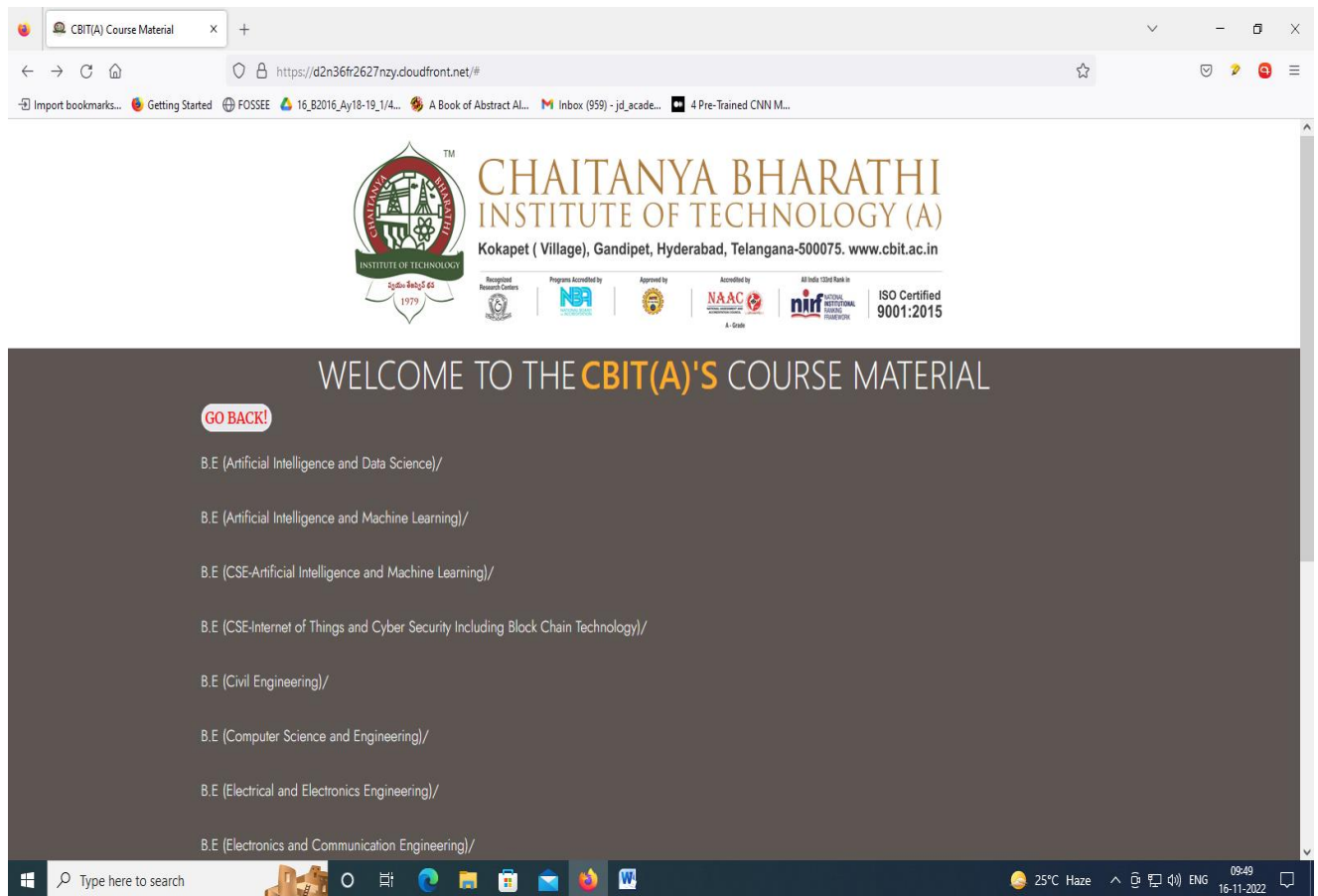


**Shortcut Video Editing Software I/F**

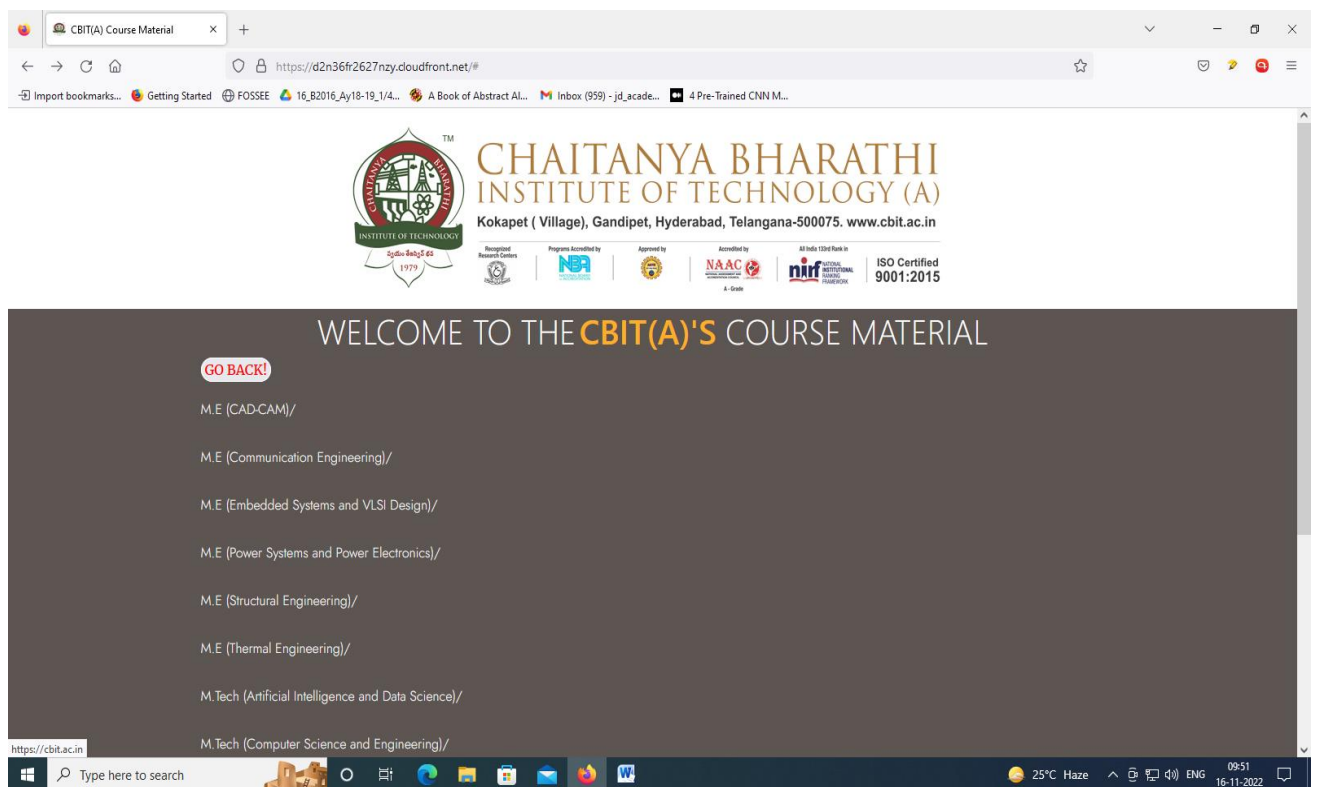


**Blender Video Editing Software I/F**

### LMS and e-content:



**Figure 1:** Screenshot showing the e-content (created by faculty) dissemination through AWS S3 service



#### 4.3.4 Media Center Facilities

The screenshot shows the 'CBIT(Autonomous) - LMS' interface. The top navigation bar includes the Chaitanya Bharathi Institute of Technology logo and the user 'Dr. M. Swamy Das Professor'. The left sidebar contains various navigation options like Dashboard, Site home, Calendar, Private files, Content bank, My courses, Edwiser Forms, Reports & Analytics, and Site administration. The main content area displays '10320 Users' and a 'New filter' section with a search bar for 'User full name'. Below the filter is a table of users.

First name / Surname	Username	City/town	Country	Last access	Edit
KALLIPUDI KARTHIKEYAN REDDY 160121734107	160121734107	HYDERABAD	India	5 days 15 hours	<a href="#">Edit</a>
RAJ KUMAR REDDY 160121737135	160121737135	HYDERABAD	India	20 hours 25 mins	<a href="#">Edit</a>

**Figure 2:** Screenshot showing the users of CBIT LMS

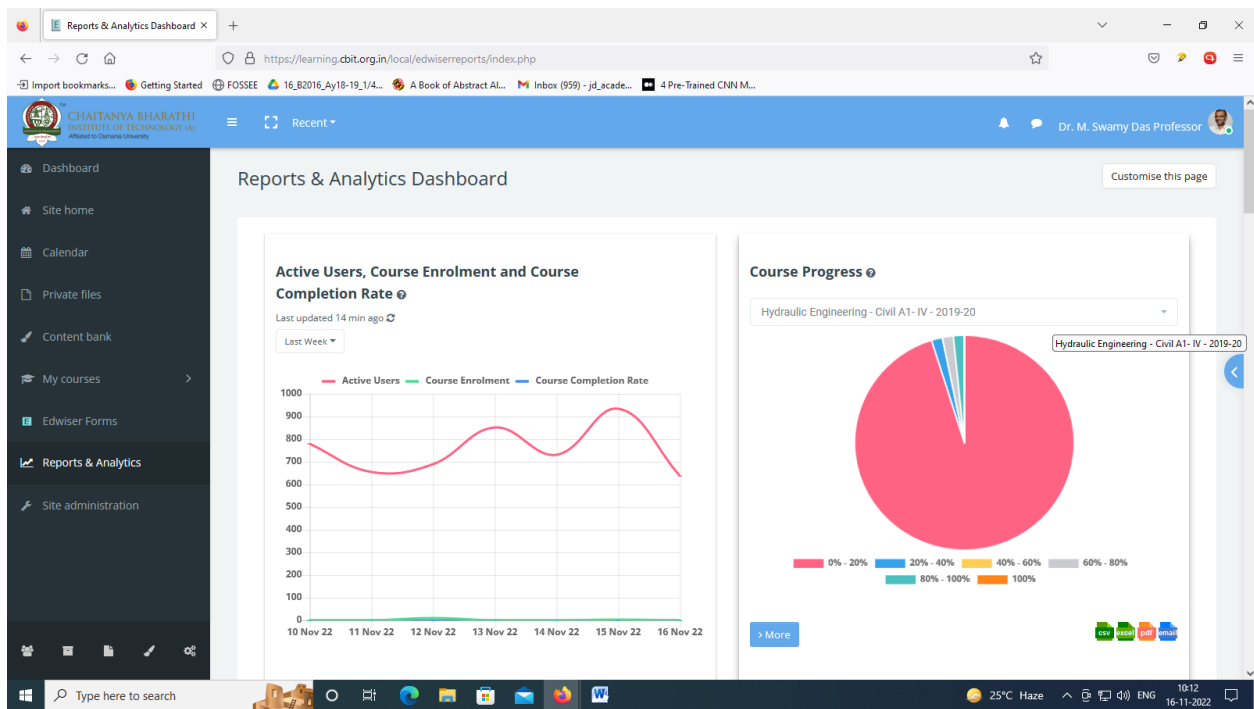
The screenshot shows the 'CBIT LMS' interface with the URL 'https://learning.cbit.org.in/course/index.php'. The left sidebar is the same as in Figure 2. The main content area displays a grid of course modules for the 'Academic Year - 2020-21'. The modules include:

- CSE - V Semester - 2020-21 - MID Examinations
- CSE - VII Semester - 2020-21 - MID Examinations
- COVID-19 Negative Declaration and Undertaking
- M.Tech-CSE-Advanced Data Structures -I - 2020-21
- CSE-Equivalent subjects- 2020-21
- Bridge Course - C Programming - 2020-21
- CSE1- Internships -2020-21
- CSE offered Additional Minor Degree Courses - 2020-21

**Figure 3:** Screenshot showing the courses and Course Modules available at CBIT LEM



#### 4.3.4 Media Center Facilities



**Figure 4:** Sample screenshot showing the LMS analytics

## IT Facilities

## 4.3.1 IT Policy


## 1. IT FACILITIES – HARDWARE


Table 2: IT Facilities at CBIT (Hardware)

Sno	Name of the Department	No. of Computers	No. of Laptops / Tabs	Printers	LCDs	No. of Webcams	No. of Headsets
1	Biotechnology	30	4	4	5	12	12
2	Chemical Engineering	36	5	5	6	12	12
3	Civil Engineering	90	10	4	11	22	27
4	Computer Science & Engineering	545	23	25	24	34	39
5	Electronics & Communication Engg.	277	17	14	19	31	35
6	Electrical & Electronics Engg. (EEE)	65	12	6	9	21	25
7	Information Technology	237	17	5	15	27	27
8	Mechanical Engineering	222	19	15	16	35	42
9	School of Management Studies (MBA)	60	7	3	5	10	13
10	MCA	71	3	4	5	6	11
11	H&S	39	18	7	18	35	35
12	CDC & Central Computing	260	NA	3	7	1	200
13	Library	50	1	1	NA	1	1
14	R&E	50	NA	6	14	3	3
15	IT Workshop & Robotics	149	NA	NA	NA	NA	NA
16	Servers HP, DELL	15	NA	NA	NA	NA	NA
17	AWS cloud resources	As per requirement					
18	Staff Systems	150	36	NA	NA	NA	NA
19	AEC&CoE	33	2	15	1	1	1
20	Purchase & Project Office, Admin,	30	12	21	1	3	3
<b>Total</b>		<b>2409</b>	<b>186</b>	<b>138</b>	<b>156</b>	<b>254</b>	<b>486</b>

Total Computers and Laptops available in working condition: **2595**

Cisco (1941) Router : **01**      Network Switches : **172**  
 Cisco (4331L) : **01**      VPN routers : **6**  
 Firewalls : **03** (Cisco MX-100, NetGate-1537, pfsense)

  
 Mr. E Sanjeeva Reddy  
 System Engineer

  
 Prof. M Swamy Das  
 Joint Director-Academics (Informatics)

  
 PRINCIPAL

CHAITANYA BHARATHI INSTITUTE OF TECHNOLOGY,  
 HYDERABAD-75

