

## Annual Report

April 2021 to March 2022

Activities of the VTU e-Learning Centre from April 2021 to March 2022 are stated below:

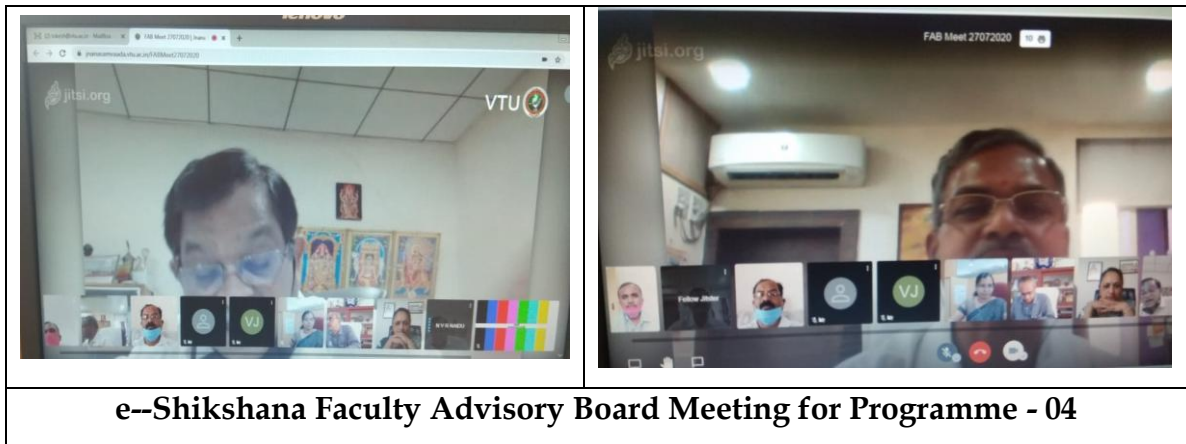
### I. VTU e-Shikshana Programme-04:

The faculty Advisory Board meeting was conducted on 27<sup>th</sup> July 2020 through virtual mode and the following 13 courses from seven major disciplines were recommended for e-Content development with the active participation of 36 course experts and 356 sessions of e-content repository.

Sl.No	Course code	Course	Credit	Course Experts	Module
1	18MAT11	Calculus and Linear Algebra	4	Dr.Pradeep C.R., CIT, Gubbi	I
				Dr.K.S.Basavarajappa, BIET, Davanagere	IV
				Dr Roopa K M, BIT, Blore	II
				Dr. P R Hampiholi, GIT, Belagavi	III
				Dr V Ramachandra Murthy, RRIT, Blore	V
2	18CPS13	C Programming for Problem Solving	3	Prof. Sudeer Anekal, VTU CPGS, Kalburgi & other IT Industry Experts	I to V
3	18MAT31	Transform Calculus, Fourier Series And Numerical Techniques	3	Dr.Pradeep C.R., CIT, Gubbi	I
				Dr.K.S.Basavarajappa, BIET, Davanagere	V
				Dr Roopa K M, BIT, Blore	II
				Dr. P R Hampiholi, GIT, Belagavi	III
				Dr V Ramachandra Murthy, RRIT, Blore	IV

4	18CV52	Analysis of Indeterminate Structures	4	Dr. B.G.Naresh Kumar, MIT, Mysuru	I & V
				Dr.H.S. Nanda, BTI, B'lore	II
				Prof. Kiran Mali Patil, KLECET, Belagavi	III
				Prof.Bhavyashree B N, MIT, Mysuru	IV
5	18CS32	Data Structures and Applications	4	Dr. S Nandagopalan, VIT, Blore	I, II & V
				Dr. Shrinivasa Naika C L UDBT, Dvanagere	III & IV
				Prof. Manohar Madgi, KLE IT, Hubballi	I & V
6	18CS52	Computer Networks and Security	4	Dr. Gururaj H L, VVCE, Mysuru	I
				Prof. Sathyanarayana S, JNNCE, Shivmoga	II & III
				Prof. Sunilkumar B S, GMIT, Davanagere	IV & V
7	17EE71	Power System Analysis	4	Dr. K. Uma Rao , RVCE, Bengaluru	IV & V
				Ms. Sushmita Sarkar, RVCE, Bengaluru	I
				Dr. Nagesh Prabhu, NMAMIT, Nitte	II
				Dr. Shobha Shankar, VVCE, Mysuru	III
8	18EC34	Digital System Design	3	Dr. Meghana Kulkarni, VTU CPGS, Belagavi	I
				Dr. Bhagyashree S R, ATMECE, Mysuru	II
				Dr. Rudraswamy, SJCE, Mysuru	III, IV & V
9	18EC54	Information Theory & Coding	3	Prof. Madhupatil, NMIT, B'lore	I, II & III
				Prof. S V Uma, RNSIT, B'lore	IV & V
10	18ME32	Mechanics of Materials	4	Dr. Babu Reddy, VTU CPGS, Kalburgi	I & II

				Dr.Ragavendra G Deshpande, SCE, B'lore	IV & V
				Dr. P L Srinivas Moorthy, Former Professor, BNMIT, B'lore	III
11	18ME52	Design of Machine Elements I	4	Dr.M.H.Annaiyah, SCE, Blore	III & IV
				Dr. Babu Reddy, VTU CPGS, Kalburgi	I & II
				Dr. P L Srinivas Moorthy, Former Professor, BNMIT, B'lore	V
12	18ARC53	Building Services-II: Electrical and Illuminations	2	Prof. Mahanthan, MSA, Mysuru	I to V
13	18ARC33	Climatology	3	Prof. Suresh Murthy, RVCA, Blore	IV
				Ar. Kuladeepkumar, IIT, Roorke	II & III
				Prof. Sanketh Ghanti, MSA, Mysuru	I & V



The above e-contents were developed and hosted at VTU e-Learning portal of 356 numbers of sessions by the support of 36 course experts with 36811 total numbers of views by the stake holders.

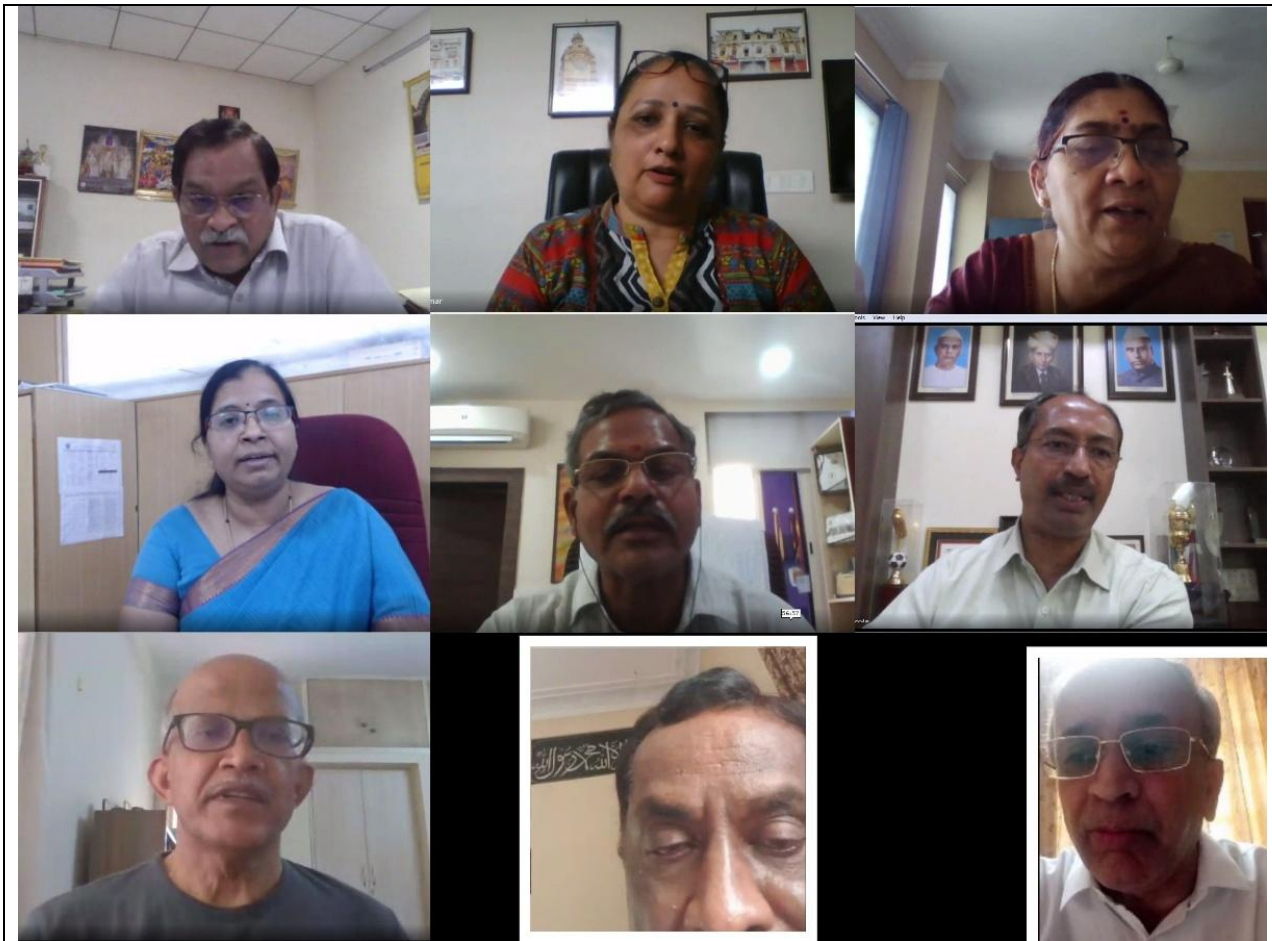
## II. VTU e-Shikshana Programme-05:

The faculty Advisory Board meeting was conducted on 08<sup>th</sup> June 2021 through virtual mode and the following 13 courses from seven major disciplines were recommended for e-Content development with the active participation of 49 course experts and 480 sessions of e-content repository.

Sl.No.	Course Code	Course Name	Sem/Dept.	Course Experts	Module
1	18ME15/25	Elements of Mechanical Engineering	Sem - II Basic Courses	Dr.K.B.Vinay, VVCE, Mysuru	1
				Dr.B.S.Nityananda, VVCE, Mysuru	2
				Dr.S.A.Mohan Krishna, VVCE, Mysuru	3
				Dr.Babu Reddy, VTU's Centre for postgraduate Studies, Kalaburagi	4
				Dr.Khalid Imran, VVCE, Mysuru	5
2	18ME44	Kinematics of Machines	IV Sem ME	Prof. Y.P.Mamatha, VVCE, Mysuru	1
				Prof. H.M.Gurudatt, VVCE, Mysuru	3
				Dr.Veeresh Chandra, SJCIT, Chickaballapur	2
				Dr.Chandra Mohan H K, SJCIT, Chickaballapur	4
				Prof. Chandan V, VVCE, Mysuru	5
3	18PHY12/22	Engineering Physics	II Sem Basic Sciences	Dr.Vijaylakshmi Dayal, MIT, Mysore	1
				Dr.D.Nagaraja, BIT, Bangalore	2
				Dr.Mahesh Lohith K S, ATME, Mysore	3
				Dr.Anandaram B N, JNNCE, Shivamogga	4

				Dr.Vincent Crasta, SJEC, Mangalore	5
4	18ARC63	Building Services III (Airconditioning, Mechanical transportation & fire protection	Sem VI Architecture	Ar.Dakshayini Patil, BMSCA	1 & 2
				Ar.Arjun K S, KSSA	3
				Ar.Mangala Mahanthan J, MSA	4 & 5
5	18EE43	Transmission and Distribution	Sem IV EEE	Dr.Uma Rao K, RVCE, Bangalore	1, 3 & 5
				Dr.Gautham N, VVCE, Mysuru	2 & 4
6	18EE825	Electrical Power Quality	Sem VIII EEE	Dr.Uma Rao K, RVCE, Bangalore	1 & 5
				Dr.Prema V, BMSCE, Bangalore	3 & 4
				Prof.Sushmitha Sarkar, RVCE, Bangalore	2
7	18MATDIP401	Advanced Mathematics-II	Common	Dr.K.M.Roopa, BIT, Bangalore	3 & 5
				Dr.K.S.Basavarajappa, BIET, Davangere	1 & 2
				Dr.P.R.Hampiholi, GIT, Belgaum	4
8	18CS61	System Software and Computers	Sem VI CSE/ISE	Mr.Vishwanath Kamatar, KLEIT, Hubballi	2 & 3
				Dr.B.A.Patil, KLE Dr.MSS College of Engineering, Belagavi	1, 4 & 5
9	18CS46	Data Communication	Sem IV CSE/ISE	Dr.Yerriswamy T, KLEIT, Hubballi	1, 2 & 3
				Dr.Umesh Somanahatti, KLE Dr.MSS College of Engineering, Belagavi	4 & 5
10	18EC63	Microwave and Antennas	VI Sem ECE	Dr.Andhe Pallavi, RNSIT, Bengaluru	5

				Dr.Venkatesh M, Sai Vidya Institute of Technology, Bengaluru	4
				Dr.K.Sreelakshmi, RVCE, Bengaluru	1
				Dr.Prasanna Paga, Nitte Meenakshi Institute of Technology, Bengaluru	3
				Dr.Sasmita Mohapatra, Sir MVIT, Bengaluru	2
11	18EC42	Analog Electronic Circuits	IV Sem ECE	Dr.Uma S V, RNSIT, Bengaluru	5
				Dr.Poornima G, BMSCE, Bengaluru	1
				Dr.Supriya V G, SirMVIT, Bengaluru	2
				Prof.C.R.Prashanth, Dr.AIT, Bengaluru	4
				Dr.Bhaskar B, SJBIT, Bengaluru	3
12	18CV43	Applied Hydraulics	IV Sem CV	Dr. Nagaraj Sitaram, EPCET, B'lore	1
				Prof. Suresh Ramaswamyreddy, BMSCE, B'lore	2 & 3
				Dr. B R Ramesh, NMIT, B'lore	5
				Dr Reshmidevi, BMSCE, B'lore	4
13	18CV61	Design of Steel Structural Elements	VI Sem CV	Prof. M C Nataraja, MSRIT, B'lore	1 & 5
				Prof. Raviraj S, SJCE, Mysuru	4
				Prof. Anil Kumar R, MSRIT, B'lore	2 & 5
				Prof. Geeta Kumari T, MSRIT, B'lore	3



**e-Shikshana Faculty Advisory Board meeting for Programme - 05**

The above e-contents were developed and hosted at VTU e-Learning portal of 380 numbers of sessions by the support of 44 course experts with 47886 total numbers of views by the stake holders.

### **III. VTU e-Shikshana Programme-06:**

The faculty Advisory Board meeting was conducted on 22<sup>nd</sup> December 2021 through virtual mode and the following 19 courses from twelve major disciplines were recommended for e-Content development with the active participation of 53 course experts and 656 sessions of e-content repository.

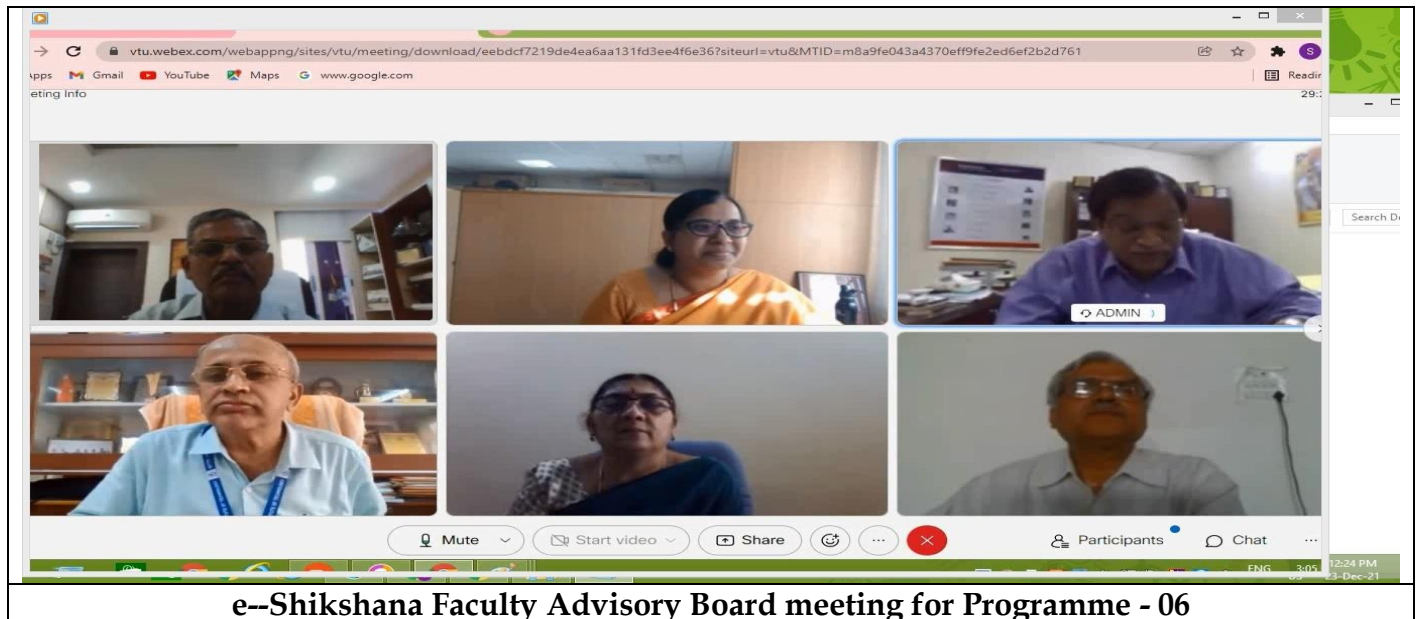
SI No	Course Code	Course Name	Credit	Course Expert Name	Hrs
1	18ARC43	BUILDING SERVICES - I (Water Supply and Sanitation)	3	Ar. Zahra Bathool, MSA, Mysuru	35
				Ar. Roopashree A P, MSA, Mysuru	
2	21CHE22	Engineering Chemistry	3	Dr. G.K. Prashanth , Sir.MVIT, B'lore	35
				Dr. G.M.Krishnaiah , Sir.MVIT, B'lore	
				Dr. Veeresh Maglad, TCE, Gadag	
				Dr. V.R.Kattimani, BEC, Bagalkot	
3	18BT63	Bioinformatics	4	Dr. H.G.Nagendra, Sir.MVIT, B'lore	40
				Dr. Gurumurthy, GMIT, Davangere	
				Dr. Jagadeesh Kumar D, Sir.MVIT, B'lore	
4	18BT43	Immuno Technology	3	Dr. Priya Narayan, Sir.MVIT, B'lore	35
				Dr. Damodar P, MSRIT, B'lore	
				Dr. Shilpa Shivashankar, AIT, B'lore	
5	18EC642	Artificial Neural Networks	3	Dr. T N Prabakar, Sri Sairam College of Engg, Bangalore	35
				Prof. Sivaprakash C, Sairam College of Engg, Bangalore	
				Dr B Srilatha, Sairam College of Engg, Bangalore	
6	18EC646	Python Application Programming	3	Sri. Poorna Prgna M S, Data Scientist, Aspino Solutions, Pvt. Ltd., B'lore	35



				Prof. Rampur Srinath, NIE, Mysuru	
7	18EE646	Electric Vehicles Technologies	3	Dr. Gopalreddy K, VVCE, Mysuru Prof. Malini K V, Sri Sairam College of Engg, Bangalore Dr. Radhakrishna K R, RIT, Hassan	35
8	18CSMP64	Mobile Application Development	3	Prof. Nithin Kumar, VVCE, Mysuru	35
9	18CV36	Engineering Geology	3	Dr. Venkataraman S Hegde, SDMCET, Dharwad	35
10	18CV642	Solid Waste Management	3	Dr. B.G. Nagendra Prasad, MIT, Thandavapura Dr. C.B. Shivayogimath, AIEMS, B'lore Dr. Amarnath Shetty, AJIET, M'lore Siddalingayya G. Hiremath, VDRIT, Haliyal Dr. P.C. Srinivasa, GEC, Mandya	35
11	18CV72	Design of RCC and Steel Structures	3	Dr. Vijaya G.S., Govt. SKSJT IT, B'lore Dr. Naveen G.M, GEC, Chamarajanagara Dr. C. Nagaraja, SIET, Tumakuru Prof. Veerendra Kumar, KSSEM, B'lore Dr. Mahesh Prabhu K, GEC,	35

				Ramanagara	
12	18EI/BM/ ML46	Scientific and Analytical Instrumentation	3	Dr. Mallikarjun S. Holi, UBDTCE, Davangere	35
				Smt. S. A. Pushpalatha, UBDTCE, Davangere	
				Smt. Sneha G. Chachadi, RNSIT, Bengaluru	
13	18EI54	Biomedical Instrumentation	3	Dr. Mallikarjun S. Holi, UBDTCE, Davangere	35
				Dr. Kumar Ganapathi Adi, UBDTCE, Davangere	
				Dr. D.R.Santosh Kumar,UBDTCE, Davangere	
14	18IP53	Quality Assurance and Reliability	4	Dr. N. Nagesha, UBDTCE, Davangere	40
				Dr. Irappa Sogalad, UBDTCE, Davangere	
15	Bridge Course	Fundamentals of Mathematics - Kannada Lectures as per NEP 2020		Dr Roopa K M, BIT, B'lore	16
				Dr K S Basavarajappa, BIET, Davanagere	
16	21MAT11	Calculus and Differential equations - Kannada Lectures as per NEP 2020	3	Dr K S Basavarajappa, BIET, Davanagere	35
				Dr Roopa K M, BIT, B'lore	
				Dr V Ramachandra Murthy, RRIT, B'lore	
				Dr. P R Hampiholi, GIT, Belagavi	
				Dr C R Pradeep, CBIT, Gubbi	

17	18MAT653	Advanced Linear Algebra	3	Dr K S Basavarajappa, BIET, Davanagere	35
				Dr Roopa K M, BIT, B'lore	
				Dr. P R Hampiholi, GIT, Belagavi	
18	18ME55	Fluid Power Engineering	3	Dr. Rishi J P, VVCE, Mysuru	35
				Dr. K.S.Ravi, VVCE, Mysuru	
				Dr. K.R.Prakash, NIE, Mysuru	
19	18ME642	Refrigeration and Air conditioning	3	Dr. Akshay S Bhat, VVCE, Mysuru	35
				Dr. Mohan Krishna S A, VVCE, Mysuru	
				Dr. Manjunath V B, VVCE, Mysuru	



Till date 288 numbers of sessions for above courses are uploaded to VTU e-Learning Portal and the e-Content development is in progress.

#### **IV. VTU e-Shikshana YouTube Channel**

The teaching/learning resources of VTU e-Shikshana Programme - 04, 05 and 06 are being made available to the learner's community through the VTU e-Shikshana YouTube channel. Presently, the channel comprises 1611 sessions of lectures. Approximately 12,600 students have subscribed to the VTU e-Shikshana channel with total views of 6,15,900 and total impressions of 65,25,192. The 88% of total e-contents being accessed by the students of age group 19 to 24, out of which 68% are male students and 32% are female students.

#### **V. VTU e-Learning Studio, Mysuru**

A dedicated full-fledged multimedia e-Learning studio has been set up by VTU e-Learning Centre, Mysuru. The e-Learning Studio comprises the recording room and control room. The e-Learning studio is being used to broadcast live lectures of the VTU e-Shikshana programme from eminent course experts from both academia and industry through the VTU e-Shikshana platform and also for development of e-Contents.



## **VI. Additional activities**

- Arrangements were made for video coverage & Live streaming of 20th Annual Convocation at VTU Head Office, Belagavi dated: 03.04.2021
- Arrangements were made for video coverage of Vice Chancellor, Registrar and Registrar (Evaluation) for NEP awareness programme-2020 at VTU Campus, Belagavi dated from 23.09.2021 to 24.09.2021
- Arrangements were made for video recording of Dean Faculty of NEP Awareness programme-2020 at MSRIT, Bangalore dated: 01.10.2021
- Arrangements were made for video coverage and live streaming of one day symposium of “Skill Development for LIS Professions” at VTU Regional Centre, Bangalore dated from 26.11.2021 to 27.11.2021
- Arrangements were made for video coverage of National Conference on “Open Scholarship and Libraries” at VTU Head quarters, Belagavi dated from 06.01.2022 to 08.01.2022
- Arrangements were made for setting up video conference for webinars on “Universal Human Values and Social Responsibilities Among Youth” at VTU Regional Office, Bengaluru dated: 11.01.2022
- Arrangements were made for video coverage & Live streaming of 21st Annual Convocation at VTU Head office, Belagavi dated: 10.03.2022
- Arrangements were made for video coverage of NAAC Peer team visit at VTU Head office, Belagavi dated from 21 .03.2022 to 23.03.2022

## **VII. e-Content Management System Portal:**

VTU e-Learning Centre has developed an e-Learning Content Management Portal using open-source software. The e-Learning Content Management system comprises of e-Contents for 413 courses with the participation of 995-course experts with a repository of 15928 video sessions

## **VIII. Sharing of e-Contents**

VTU e-Learning Centre is providing available e-contents to requested colleges for local intranet campus access. We have deployed VTU Content Management System to VTU Centre for Post Graduation Studies, Mysuru.

## IX. Webinars and Live Streams Conducted:

- Visvesvaraya Technological University, e-Learning Center, Mysuru organized Technical Talk Series-I: Webinar on **“ADVANCES IN AEROSPACE TECHNOLOGY”** for VTU affiliated and autonomous engineering institutions as a part of 75<sup>th</sup> Indian Independence Celebration, “Azadi Ki Amrith Mahotsav”, on 21<sup>st</sup> October 2021. Webinar was addressed by “Missile Woman of India”, Dr. Tessay Thomas, Director General, Aeronautical Systems, DRDO, New Delhi.
- Visvesvaraya Technological University, e-Learning Center, Mysuru organized Technical Talk Series-II: Webinar on **“Learning from Nature: Emergent Behavior in Active Matter”** for VTU affiliated and autonomous Engineering Institutions as a part of 75<sup>th</sup> Indian Independence Celebration, “Azadi Ki Amrith Mahotsav”, on Thursday 25<sup>th</sup> November 2021. Webinar was addressed by Dr. Ajay K. Sood, Honorary Professor, Department of Physics, Indian Institute of Science (IISc), Bangalore, India.
- Visvesvaraya Technological University, e-Learning Center, Mysuru organized Technical Talk Series-III: on **“Universal Human Values and Social Responsibilities among Youth”** on 11<sup>th</sup> January, 2022. The webinar was addressed by Nobel Peace Laureate, Sri. Kailash Satyarthi.
- Visvesvaraya Technological University, e-Learning Center, Mysuru organized Webinar on **“SARS - COV 2 Vaccine Challenges for India”** on 16<sup>th</sup> June 2021 for VTU affiliated/constituent/autonomous engineering institutions with an objective to know the Challenges of Covid Vaccination in India, Webinar was addressed by Padmabhushan Prof. G Padmanaban, Distinguished Scientist, Former Director, IISc., Department of Biochemistry, IISc. Bangalore, Chancellor, Central University of Tamil Naidu, NASI Honorary Scientist, Senior Science Innovation Adviser, Ministry of Science and Technology, Govt. of India.

- Visvesvaraya Technological University, Belagavi organized Webinar on “Implementation of NEP - 2020 in Technical Institutions” on 2<sup>nd</sup> June 2021. Webinar was addressed by Prof. Anil Sahasrabudhe, Hon’ble Chairman, AICTE, New Delhi.

#### **X. VTU PhD Coursework Online Classes: Online Certification Course**

VTU e-Learning Centre is initiated to conduct online classes through VTU-LMS (Learning Management System) portal for VTU Online Certification Courses. The teaching-learning contents will be developed in the 4 Quadrant approach.

#### **XI. VTU - SWAYAM Local Chapter**

VTU e-Learning Centre, Mysuru has set up VTU SWAYAM Local chapter in November 2015. The objective is to create awareness and enable students to obtain certification on different subjects, which makes them more employable or helps them to pursue higher education. The enrollment details for SWAYAM MOOC courses are shown in the below table.

#	Semesters	Courses Offered	Enrollments
1	January - April 2021	505	588
2	July December 2021	631	436
3	January - April 2022	592	474

#### **XII. VTU Learning Management System: VTU-LMS**

With the present pandemic hitting the world, it is interesting to note that the traditional means of imparting knowledge in institutes of higher education have also been impacted to a considerable extent. In this context, it has become imperative to explore other learning mechanisms one of which is the Virtual Learning Approach. In this scenario, VTU e-Learning Centre, Mysuru has deployed VTU-Learning Management System for the benefit of VTU Stakeholders.

Using VTU-LMS, the faculty can create and disseminate e-content in four-quadrant approaches to their students in a flexible manner. The features of VTU-LMS are personalized dashboard creation, easy to use interface, collaborative tools, automatic alerts and notifications, customized role creation, etc

VTU-LMS can assist to customize the content for teachers' course content and also aid course delivery administrators to track the performance of the students and customize the site as per institutional requirements.

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