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## Annual Report

April 2019 to March 2020

Activities of the VTU e-Learning Centre during April 2019 to March 2020 are stated below:

### **I. VTU e-Shikshana Programme-01: 25<sup>th</sup> February, 2019 to 10<sup>th</sup> May, 2019**

The VTU e-Learning Centre is mainly involved in facilitating technology enhanced learning and training to the students and faculty of VTU through satellite and web. Currently, VTU e-Learning Centre has migrated from satellite based EDUSAT programme to web based e-Shikshana programme. The faculty Advisory Board meeting was conducted on 06<sup>th</sup> February 2019 and committee decided to transmit the below mentioned courses. The live streaming of the following five courses was carried out successfully and it was well received and utilized by VTU affiliated colleges.

- 18MAT21 - Advanced Calculus and Numerical Methods
- 18ELN24 - Basic Electronics
- 17CV43 - Applied Hydraulics
- 17ME43 - Applied Thermodynamics
- 17EE61 - Control Systems
- Placement and Training
- Career Guidance Programme



## II. VTU e-Shikshana Programme-02: 19<sup>th</sup> August, 2019 to 16<sup>th</sup> November, 2019

The e-Shikshana Faculty Advisory Board meeting was conducted on 22<sup>nd</sup> July, 2019 and identified to transmit the lectures of following courses from five major disciplines. The live streaming of the following six courses was done successfully.

- 18MAT31 - Transform Calculus, Fourier Series and Numerical Techniques
- 18EC33 - Electronic Devices
- 17ME54 - Design of Machine Elements-1
- 18CV32 - Strength of Materials
- 17CS553 - Advanced Java and J2EE
- Placement and Training
- Career Guidance Programme



**Felicitation to Course Experts of VTU e--Shikshana Programme - 02**

### **III. VTU e-Shikshana Programme-03: 12<sup>th</sup> February, 2020 to 16<sup>th</sup> May, 2020**

The e--Shikshana Faculty Advisory Board identified to transmit the lectures of following courses from seven major disciplines. The live streaming of the following seven courses was done successfully.

- 18MAT41 Complex Analysis, Probability and Statistical Methods
- 18EE45 - Electromagnetic Field Theory
- 18CV42 - Analysis of Determinate Structures
- 17ME63 - Heat Transfer
- 18EC46 - Microcontroller
- 17CS61 - Cryptography, Network Security and Cyber Law
- 15ARC6.6 - Landscape Architecture
- Placement & Training and Career Guidance programme



**e--Shikshana Faculty Advisory Board meeting for Programme - 03**

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

Due to unexpected COVID-19 lockdown period, it was challenge to VTU e-Learning Centre to reach teaching/learning resources of VTU e-Shikshana programme - 03 to mass student community. VTU e-Learning Centre created VTU e-Shikshana YouTube Channel to provide the academic learning resources to the mass student community without any academic interceptions.

The teaching/learning resources of VTU e-Shikahana Programme - 03 is being made available to learners community through e-Shikshana YouTube channel on every successful recording during COVID - 19 lockdown period. Presently, the channel comprises of 228 hours of lectures. An approximately 4500 students has subscribed to VTU e-Shikshana channel with a total views of 78068 and total impressions of 6,25,192. The 91% of total e-contents being accesses by the students of age group 19 to 24, out of which 55% are of male students and 45% are female students.

## **V. e-Learning Studio**

A dedicated full-fledged multimedia e-Learning studio has been setup at second floor of training block of VTU Regional Centre, Mysuru. The e-Learning Studio comprises of recording room and control room. The e-Learning studio is being used to broadcast live lectures of VTU e-Shikshana programme from eminent course experts from both academia and industry through VTU e-Shikshana platform and for e-Content generation.

## **VI. Additional activities**

- Video recording & editing of Foundation Day celebration held on 29.04.2020 to 30.04.2020 (Technical Project Exhibition)
- Video recording of 1st Committee visit to Kodagu on 09<sup>th</sup> to 10<sup>th</sup> May 2019
- Video recording and editing of National Conference on Innovation in Libraries conducted on 06<sup>th</sup> to 08<sup>th</sup> June 2019 at VTU, Belagavi
- Video coverage and editing of VTU IMAE workshop at VTU, Regional Office, Bangalore on 22 August 2019
- Video recording and editing of NAAC workshop at VTU Regional Office, Bangalore on 25 October 2019
- Video coverage and mastering of third party inspection for verification of Lab equipment at UBDTCE, Davangere on 26 October 2019
- Video coverage of Higher Education Minister Visit to VTU CPGS, Muddenahalli on 28 October 2019

- Organize Principal meeting through e-Shikshana from VTU Head Quatras, Belagavi on 03<sup>rd</sup> and 04<sup>th</sup> December 2019



- Video recording and editing of MESSEGE - 2019 two day National Conference on Nano Technology at VTU CPGS, Muddenahalli on 19 & 20 December 2019

- To set up e-Shikshana studio and VTU Stall at 107<sup>th</sup> Indian Science Congress at GKVK campus from 02<sup>nd</sup> to 07<sup>th</sup> January 2020



- Video recording and editing of lecture sessions of Prof.Nandkumaran, IISC, Bangalore on 04<sup>th</sup> & 05<sup>th</sup> and 10<sup>th</sup> & 11<sup>th</sup> Feb 2020 for VTU e-Shikshana Programme - 03
- Video recording with editing and live transmission of 19<sup>th</sup> VTU Annual Convocation at VTU, Belagavi on 08<sup>th</sup> February, 2020

- e-Shikshana Teacher Node set up to following e-Shikshana facilitated colleges
  - R.R. Institute of Technology, Bangalore
  - Dayanandasagar Academia for Technology and Management, Bangalore
  - Reva Institute of Technology and Management, Bangalore
  - Rajeev Gandhi Institute of Technology, Bangalore

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

VTU e-Learning Centre has developed an e-Learning Content Management Portal using open source software's. The e-Learning Content Management system comprises of the following list of e-Contents.

Sl.No	Particulars	Nos	Total
01	<b>e-Contents</b>		<b>471</b>
	NPTEL	102	
	VTU UG and PG e-Contents	225	
	Faculty Enrichment Programmes	08	
	Lecture programme by Industry experts	16	
	e-Content development under progress	120	
02	Total Course experts participation		<b>800+</b>
03	Total Hours of video available at VTU e-Learning portal		<b>15120+</b>

Currently, the total data of e-Content repository comprises of 6.5 TB and periodically in every successive completion of VTU e-Shikshana programme the e-Contents will be adding to the existing e-Content repository.



### 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 following colleges.

- Bellary Institute of Technology and Management
- Nagarjuna College of Engineering, Bangalore
- SJC Institute of Technology, Muddenahalli
- VTU Centre for Post Graduation Studies, Mysuru



## **IX. Workshops/ Webinars Conducted/ Training Programme**

- Conducted three days workshop on "Research Methodologies and Latex" at Don Bosco Institute of Technology, Bengaluru from 19<sup>th</sup> to 21<sup>st</sup> June 2019. Around 130 Research Scholars participated and benefited from this workshop. The workshop also been recorded and live transmitted through e-Shikshana platform to all affiliated colleges.
- Conducted six days workshop on "Research Methodologies and Latex" at Rao Bahadur Y Mahabaleswarappa Engineering College, Ballari from 08<sup>th</sup> to 13<sup>th</sup> July 2019. Around 60 Research Scholars participated and benefited from this workshop. The workshop also been recorded and live transmitted to all affiliated colleges through e-Shikshana platform.
- Conducted three days workshop on "Research Methodologies and Latex" at Shree Devi Institute of Technology, Mangalore from 05<sup>th</sup> to 07<sup>th</sup> September 2019. Around 70 Research Scholars participated and benefitted from this workshop. The workshop was recorded and live transmitted through e-Shikshana platform across all the VTU affiliated colleges.
- Conducted three days workshop on "Research Methodologies and Latex" at Sri Venkateshwara College of Engineering, Bangalore from 14<sup>th</sup> to 16<sup>th</sup> November 2019. Around 56 Research Scholars participated and benefitted from this workshop. The workshop was recorded and live transmitted through e-Shikshana platform to VTU affiliated colleges.
- Conducted two days e-Shikshana awareness programme at VTU Regional Centre, Kalaburgi on 05<sup>th</sup> to 06<sup>th</sup> December 2019. The agenda of awareness programme is to brief the VTU e-Shikshana activities and e-Learning initiatives. The Principals and the coordinators from affiliated colleges of Kalaburgi region had been benefitted from this awareness programme.



### X. VTU Online Certification Course

VTU e-Learning Centre is initiated to offer VTU Online certification Course in the area of Data Science. The teaching learning contents will be developed in 4 Quadrant approach. The proposed certification course helps the learning aspirants to build their career in the area of Data Science. The following courses are approved for Certification Courses

Sl.No	Name of the Course
01	Machine Learning for Data Science using R
02	Data Analysis and Visualization
03	Artificial Intelligence and Machine Learning

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

VTU e-Learning Centre, Mysuru has setup VTU SWAYAM Local chapter on 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 below table.

#	Semesters	Courses Offered	Enrollments
1	January - June 2019	391	1248
2	July December 2019	359	1080
3	January - June 2021	292	1298

## **XII. Online IPR Programme**

VTU e-Learning Centre in association with Origin IP Academy, Bengaluru has launched an online course on Intellectual Property Rights (IPR) to make the VTU faculty/students to learn various skills needed for research and development. Around 16 candidates have completed the online certification course on IPR and 08 students have enrolled for the course.

## **XIII. Teaching Learning Process Management System - TLPMS:**

VTU e-Learning Centre has developed TLPMS (Teaching Learning Process Management System) platform with evaluation process for VTU Centre for Post Graduation Studies.

Demonstration had been given to all the Chairmen's of VTU Centre for Post Graduation studies at Registrar Conference hall on to seek suggestions and plan of actions towards implementing of Teaching Learning Process Management System.

The platform has following features

- Student Enrollment and profile
- Teaching/Learning Process
- Teacher Profile and Quality
- Evaluation Process and Reforms
- Student Performance and Learning Outcomes
- Student Satisfactory Survey

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