STRATEGIC PLAN

(2016-2023)



University Computer Centre & Digital Affairs Cell J.C. BOSE UNIVERSITY OF SCIENCE AND TECHNOLOGY, YMCA, FARIDABAD

(Formerly YMCA University of Science and Technology)

NAAC 'A' Grade accredited State University Sector-06, Delhi Mathura Road, Faridabad -121006 (Haryana)

About University Computer Centre and Digital Affairs Cell (UCC&DA)

The revolutionary advancement in digital technologies has necessitated the dissemination of these technologies to society and also to adopt it for modern education. The University has set up a University Computer Centre and Digital Affairs Cell (UCCDA). It was established in the year 2019 by combining two entities: IT Cell (Incepted in 2017 to ascertain ICT infrastructure and networking facility in the University) and Digital Cell (Incepted in 2015 to ensure implementation of digital initiatives and digital learning environment in the University). It is taken as centralised resource facilitator for computerization with an aim to cater to the needs of the entire University (students, research scholars, teachers and other staff of the University). Its associated objective is also to automate administrative and secretarial wings of the University. Cell is working to progress the university towards digital universe, taking care of ICT infrastructure and conducting regular events/activities/workshops related to digital payment missions, digi-locker facility, MOOCs, digital literacy, consumer services and technical fests for our students and staff. Cell has worked in a direction to implement National Academic Depository, Digi-Locker scheme, SWAYAM Prabha, Credit transfer via SWAYAM MOOCs, Digital Classrooms, Digital Notice Boards and Lecture Capturing facility in the University premises.

The broad objectives are:

- > To strengthen ICT infrastructure including Wi-Fi and wired connectivity
- > To support in automation of different data processing works of the University
- To act as an advisory unit to the University on matters relating to procurement, usage, and maintenance of computing and network equipment
- > To review and monitor the current use of digital resources
- > To suggest ways and initiatives to improve utilization of digital resources
- To develop dedicated infrastructure in the University to facilitate demonstration of training programmes pertaining to digital technologies and its applications in technical education.
- > To promote R&D on emerging Digital Technologies in the University.
- > To enhance Digital Learning by using Govt. Platforms like SWAYAM-NPTEL.
- > Enhance paper-less working and cashless transactions in the University
- To implement various schemes/facilities provided by UGC/AICTE/other Govt. bodies in the University.
- To ensure online availability of the all-relevant information through University website
- To provide training and support to students and the university staff related to various software procured or developed in-house by the University



The UCC&DA Team

CONSTITUTION OF THE CELL

Name	Role	Task(s)			
Dr. Neelam Duhan	Director, UCC&DA	Overall responsible for activities related to cell.			
Team- Digital Affairs					
Ms. Manju Rani (EE) Dr. Rewa Sharma (CE) Ms. Shivi Garg (CE)	Coordinator	 MOOC enrolments of students for Credit transfer MOOC enrolments of faculty for enhanced learning as per AICTE mandate SWAYAM-NPTEL Local Chapter IIRS-ISRO outreach programmes for students/faculty Other online courses except SWAYAM 			
Dr. Lalit Goyal (CE) Dr. Arun (Physics)	Coordinator	 Digital classrooms Digital Notice Boards Lecture Capturing System for MOOC development/ online teaching Virtual Labs 			
Sh. Sachin Gupta (AR (Exams))-Nodal Officer (NAD) Dr. Deepika Punj (CE)	Coordinator	 NAD implementation Digi-Lockers for students/staff e-Office implementation 			
Sh. Ankit Pannu (System Analyst) Sh. Omdev (programmer)	Coordinator	 Digital Learning management System (DLMS) Faculty Information Management system (FIMS) 			

Sh. Nitin Panwar (ME) Dr. Suraj Goyal (Maths) Ms. Alka Rawat (JMC)	Coordinator	 SWAYAM Prabha Digital Literacy Programmes Student activities and events Miscellaneous day to day tasks 		
Sh. Jitender (PRO)	Coordinator	Digital media/coverage		
Sh. Sanjay Kumar (CE) Sh. Krishan Kumar (CE)	Technical Support Team	Taking care of technical requirements/issues		
Team- University Computer Centre				
Sh. Ankit Pannu	System Analyst	Maintenance of Central Computing Facilities, University Website, ERP, different		
Sh. Omdev	Programmer	e-Platforms, Data Servers and Hosting		
Sh. Manmohan Dagar	Technician			
Sh. Himanshu Singh	Lab- Technician			
IT Team				
Sh. Jitender Taneja	HOS (IT)	Maintenance of ICT infrastructure in University Campus		
Sh. Mohan Singh	Sr. Instructor			

CONTACT US:

digitalindiacell@jcboseust.ac.in

itcell@jcboseust.ac.in

STUDENTS TEAM

Sr. no	Position	Name	
1	Student Founder Team	Praveen Kumar Munish Kumar Garg Monika Chauhan Riya Yadav Mandeep Punia	Mohit Singwal Yogesh Yadav Radhika Jyoti
2.	Joint Secretaries	Sumant Gupta Shraddha Pandita	Satvik Aggarwal Vivek Aggarwal
3	VLabs Coordinators	Ritesh Aggarwal Manav Bansal	Prateek Nara

4	MOOC Coordinators	Prajwal Batra Rohit Garg	Siddhant
5	Session Heads	Parag Thakur Sunil	Priyal
6	Senior Coordinators	Ritik Goyal	Shreya
7	Student Coordinators	Aditya Bansal Tilak Raj Yash Bansal	Sameep Mago Ritik Ranga

VISION

- A reliable internet facility for each stakeholder of the university while making use of ICT to ensure that the information resources of the university are structured in integrity.
- Knowledge empowerment mediated by ICT and digital pedagogies.
- Making university digitally empowered in the field of technology.

MISSION

To create stat-of-the-art ICT infrastructure for imparting quality education and to promote technology enabled learning

STRATEGIC GOALS

- To provide a central computing facility with Network Server for all the students and staff of the University.
- To make the facility available and also offer possible assistance in conducting their research, analysing their data etc.
- To assist various departments/sections in the University in computerising their activities.
- To establish, coordinate, maintain and administer campus-wide Network including Internet and allied services.
- To work as a co-ordinating centre in networking with computer centres of other universities for exchange of expertise and software.
- To promote and also to undertake Consultancy/Contractual work relating to use of computer facilities or developing software on payment basis, for generating revenue for upkeep/upgrading of computer centre facilities, as per the Rules/ Statutes/ Ordinances of the Universities. Such work can be carried out either independently or as a joint venture with other professionals from public or private sectors.

- To keep track of the latest developments in Computer Hardware/Software technologies internet technologies and collect information, acquire and impart knowledge to the university staff, to collect and collate information/data to facilitate staff and students.
- To coordinate and extend support to various departments in the university to organize classroom teaching.

SWOC ANALYSIS

The UCC & DA introspects itself through SWOC analysis as under:

Strengths

- Institute is fully Wi-Fi enabled campus and all departments are LAN connected.
- University's Website is in-house developed and maintained to keep information up-to-date
- University's ERP is in-house developed. Students' life cycle including registrations and examinations, results, academics, affiliation and faculty details are maintained on ERP.
- In-house developed Digital Learning Management System (DLMS) to support teaching-learning in the online mode
- Faculty Information Management System (FIMS) is developed as a part of ERP so as to keep all the academic and research details of faculty, which can further be utilized for accreditation and promotion purposes.
- Central computing facility in terms of a central computer centre with 100 computers and other facilities to all students/staff of the university
- National Academic Depository (NAD) is implemented since 2017 and academic awards are being pushed to NAD accounts via digi-locker facility.
- University is established as Nodal Centre for Virtual Labs under NMEICT, Ministry of Education
- University is established as SWAYAM-NPTEL Local Chapter on SWAYAM platform and is top-100 active local chapter amongst 4000 local chapters of country.
- SWAYAM-Prabha has been set-up at two prominent locations of university
- University is IIRS-ISRO Outreach Centre to conduct online courses related to space and geo technology
- Establishment of 13 Digital Classrooms in various departments of the University to enhance digital learning
- More than 75% faculty trained in digital pedagogies on SWAYAM platform by IIT Bombay
- Installation of Digital Notice Boards in university premises

- Installation of Digital interactive panels in administrative conference rooms for video conferencing and meetings
- Lecture Capturing System is in progress to create the facility of recording and streaming high quality video lectures of faculty
- Set-up of COVID-Helpdesk during pandemic so as to help the needy persons by providing reliable resources
- A series of events have been conducted to promote digital learning, technologyenabled processes and remote access to resources.
- Digital literacy program for community people have been conducted.
- A capable team of faculty members and students to work in the direction of digital empowerment

Weakness

- Adaptability issues to move to digital learning and digital pedagogical techniques by the non-technical teachers.
- Scope of improvement in existing ICT infrastructure

Opportunities

- Opportunity for developing a smart campus with increased availability of communication and secure information.
- To develop a common place at central location in the university to be acted as Digital Lounge wherein students/staff can access university facilities digital mode
- To interact and collaborate with peer universities to create a pool of digital resources for sharing purpose.
- To implement blended and flipped learning model in the university.

Challenges

- New courses in the university are being introduced. In other words, stakeholders are increasing every year which in turn causes increase in bandwidth demand or changes in the layout of networking.
- Adaptation to the new policies introduced by UGC and other statutory bodies time-to-time related to online and digital education.

ACTION PLAN

UCC&DA has set-up a strategic action plan for 2016-2023 and always striving to implement this action plan:

Action Plan- Year 2016-2023

Year 2016-17

- > To implement nine pillars of Digital India to execute Digital India Campaign
- To open Digi-lockers of university faculty/staff

Year 2017-18

- To implement National Academic Depository Scheme of UGC to upload academic awards of students online
- To establish a local chapter on SWAYAM-NPTEL to run SWAYAM MOOCs in the university
- > Frame guidelines for running MOOCs and credit transfer accordingly
- > To strengthen the wired and wireless networking in the university
- Design & develop the new website of the University
- To develop ERP of university to automate various university processes

Year 2018-19

- > Extend the National Optical Fibre Network NKN line to 10 GBPS
- > To upgrade ERP of university to automate various university processes
- To make university cashless
- To create a central computing facility in terms of a central computer centre (with min 100 systems) with network server to serve IT needs of all students and staff

Year 2019-20

- Design, develop and deploy a Faculty Information Management System (FIMS) for the university teaching faculty to store academic & research details.
- Design, develop and deploy a Digital Learning Management System (DLMS) for the university to assist teaching-learning in the online mode.
- > To establish Digital Classrooms in the university for better interactive classes
- To replace conventional notice boards with Digital notice boards

Year 2020-21

- Upgrade Digital Learning Management System (DLMS) to support live classes and automated attendance compilation
- > Develop and deploy a COVID-helpdesk to help the society during COVID outbreak
- Make the ERP more flexible so that new changes in curriculum, academic activities can be adopted easily.

Year 2021-22

- Upgrade university network with Wi-Fi Connectivity across campus to cover new buildings and residential area. Upgrade university network with backbone cable of optical Fibre.
- Setting-up of Lecture Capturing facilities for recording and streaming high quality video lectures
- Implement Samarth ERP of Ministry of education to automate various university process.
- Implement blended learning in existing teaching-learning to have a hybrid model of offline & online classes.

Year 2022-23

- Extend the National Optical Fibre Network NKN line to 100 GBPS
- Bi-lingual design of university's website
- Establish Flipped classrooms in each department
- Extensibility of Digital classrooms
- Create a provision in which all types of payment will be centralized so that total revenue or expenditure of university can be seen in one view.
- To promote and also to undertake Consultancy/Contractual work relating to use of computer facilities or developing software on payment basis, for generating revenue for upkeep/upgrading of computer Centre facilities, as per the Rules/Statutes/Ordinances of the University. Such work can be carried out either independently or as a joint venture with other professionals from public or private sectors.