

**SIGNIFICANT IMPROVEMENTS AND INITIATIVES TAKEN BY DEI IN THE LAST ACADEMIC SESSION
(2018-19)**

CRITERION 1 : CURRICULAR ASPECTS

A. New Departments

1. Civil Engineering
2. Footwear Technology
3. Architecture

B. New Academic Programs introduced

1. BBA (Logistics)
2. BBA (Retail)
3. BA (Social Science) Cognitive Science
4. BSc Cognitive Science
5. BCom Corporate Law and Accounting
6. Vocational Programs - BVoc
 - (i) *Banking and Finance*
 - (ii) *Robotics and AI*
 - (iii) *Pottery and Ceramic design*
 - (iv) *Commercial Arts*
 - (v) *Digital Manufacturing*
 - (vi) *Telematics*
 - (vii) *Telecommunications*
 - (viii) *Bamboo and Wood Technology*
 - (ix) *Recycled Craft Design*
7. MA (Social Science with specialization in Business Management)
8. MBA (Waste Management and Social Entrepreneurship)
9. PhD in Civil Engineering
10. PhD in Footwear Technology

C. New Centres of Excellence in School of Education established

- Centre for Knowledge Acquisition Retention and Transformation (CKART) through Visual and Performing Arts, Yoga/Meditation and Brain-based Learning
- Centre for Artificial Intelligence in Education (CAIE)
- Twelve new courses introduced under these Centres and 8 training programs conducted (1750 beneficiaries)

CRITERION 2 : TEACHING, LEARNING AND EVALUATION

1. Awards and Recognitions received by the Institute/Faculty/Students
 - *UP NEDA Save Energy Award 2019*
 - *Faculty and Student Awards and Recognitions (Memberships of National Bodies-AICTE, MEITY, DST, DRDO, NCTE, NAAC, Journal Editorial Board Memberships, Reviewers for Journals, Fellowships etc.) : 53*
2. Contributed in developing the recommendations of UGC outcome-based evaluation reforms for higher education and training across the country

11. Contributed in the finalization of learning outcomes for secondary education in National Workshop by NCRT
12. Introduced Lateral Entry Scheme from UG, Diploma or BVoc programs to various other programmes.
13. Integration of Performing Arts (Drama, Music and Puppetry) in Education (UG Internship)
14. Introduction of Mind Mapping in UG Internship
15. Introduction of Enrolment in SWAYAM/NPTEL/MOOCs

CRITERION 3: RESEARCH, INNOVATION AND EXTENSION

1. Established 9 research divisions to encourage trans-disciplinary/multi-disciplinary research.
2. Provided seed money to young faculty for research.
3. Established institute innovation council and conducted number of talks/workshops.
4. Organised research fair for research promotion.
5. Patents Awarded: 05
6. Patents Applications submitted: 03
7. Workshops/Seminars conducted on IPR and Industry Innovative Practices: 13
8. Free Business Advisory Services: 611 to 202 clients.
9. No. of Extension and Outreach Programs in collaboration with Industry: 191
10. Collaboration activities for research, faculty exchange: 65
11. No. of Linkages with Institute/Industry Internship: 311
12. New MoUs with prestigious foreign universities: 4
 - a. *University of Manitoba, Canada*
 - b. *University of New England, Australia*
 - c. *Seneca College of Applied Arts and Technology, Canada*
 - d. *UUNZ Institute of Business, New Zealand*
13. Augmented Agricultural and Research Activities in Solan, HP.
14. Organized Exchange Program with the University of Hong Kong.
15. Student visit to Seneca Community College, Canada.
16. Initiated collaborative coursework with Seneca College Canada.
17. Organized Foldscope and Frugal Innovation Camps in collaboration with Stanford University, USA, for tribal students at Rajaborari, MP.
18. Organized Science Education Workshop sponsored by the Indian National Science Academy, for tribal students at Rajaborari, MP.
19. Designed and launched the Government of India – “Code India Program” to promote computer among school students across India through App-programming.
20. No. of Departments with SAP/FIST/School of Education recognition: 12
21. No. of Research Projects to date: 16
22. No. of Workshops/Conferences organized to date: 16
23. Consultancy for wetting of DPRs for Agra Smart City.

Support for Research

Sl. No.	Heads	2018-19 till 30.11.19 Amount in Rs. (Lakhs)
1.	R & D Grants from Non – Govt. sources	53.75
2.	R & D Projects from Govt. Funds	740.53
3.	Revenue from Consultancy	38.10
4.	Seed Money provided for Research	1623.15

Some of the Workshops/Conferences/Events Organized (www.dei.ac.in)

S.No.	CO-ORDINATOR	EVENT	DURATION
1.	Prof. Sukhdev Roy	UGC-SAP SEMINAR ON ADVANCES IN NANO AND BIO SCIENCES	March 27, 2019
2.	Prof. Shalini Nigam	MILAN 2019, Faculty of Social Science	04-04-2019 to 06-04-2019
3.	Prof. A. K. Saxena	NBA Workshop, Faculty of Engineering	19-04-2019 to 23-04-2019
4.	Dr. Pratima Singh	TEACHING THROUGH VISUAL & PERFORMING ART, Faculty of Education	06-05-2019 to 07-05-2019
5.	Dr. Neha Jain	TEACHING WITH ARTIFICIAL INTELLIGENCE, Faculty of Education	22-05-2019 to 31-05-2019
6.	Dr. Ranjeet Kumar	INDO- US WORKSHOP, Faculty of Science	13-06-2019 to 16-06-2019
7.	Dr. Sona Dixit	TEACHING WITH PUPPETRY, Faculty of Education	04-06-2019 to 06-06-2019
8.	Prof. Ashok Yadav	TRAINING PROGRAM, TEQIP-III	09-07-2019 to 10-07-2019
9.	Dr. Sumita Srivastav	ENTERPRENEORSHIP RESEARCH DIVISION, Faculty of Social Science	02-08-2019 to 03-08-2019
10.	Dr. Kalpana Gupta	WORKSHOP, Faculty of Education	01-08-2019, 04 & 05-08-2019
11.	Dr. G. P. Rana	SOLARTHON, BVOC Renewable Energy	09-09-2019 to 14-09-2019
12.	Dr. Sumita Srivastav	ENTERPRENEORSHIP, Faculty of Social Science	18-09-2019
13.	Dr. D. Vasanta	SCHOOL OF EDUCATION	21-09-2019 to 22-09-2019
14.	Dr. Sona Dixit	SCHOOL OF EDUCATION	19-10-2019 to 20-10-2019
15.	Dr. N. P. S. Chandel	SCHOOL OF EDUCATION	21-10-2019 to 23-10-2019
16.	Dr. Brij Raj Singh	HOUSEKEEPING TRAINING - BVOC	14-11-2019 to 19-11-2019
17.	Prof. Anand Mohan	RECONNECTING WITH NATURE	23-11-2019
18.	Prof. Sahab Dass	Workshop on Instrumental Techniques in Chemical Analysis	26-29-11-2019

CRITERION 4 : INFRASTRUCTURE AND LEARNING RESOURCES

1. New Land Acquired: 17 acres
2. New Lecture Halls established: 26 rooms (Area 3741 m²)
3. Substantial increase in Library expenditure
4. Subscription to e-journals: Rs. 16 Lakhs
5. Enhancement of IT Facility – CCTV Surveillance: 60 Cameras
6. Networking Cisco firepower firewall and cisco core switches: Rs. 82 Lakhs
7. New Computers added: 200
8. Network Attached storage 250 TB : Rs.21 lacs
9. UGC ODL video and biometric surveillance: Rs. 85 lacs
10. BGP router: Rs. 20 lakhs
11. Interactive panels
12. Video Wall in Conference room
13. Enhanced ICT facility in all Labs

A. New Buildings Constructed

S.No.	Particulars	Plinth Area (sq. m)	Cost (Rs. In Lakhs)
1.	Lecture Hall Complex for School for Education	3742	561
2.	Lecture Hall – 1 (Bamboo)	743	120
3.	Lecture Hall – 2 (Bamboo)	443	71.55
4.	Faculty of Integrative Medicine (Homeopathy Medical College)	2930	654
5.	Food and Dairy Testing Laboratory	297.68	44.65
6.	Value Addition Laboratory	185.87	28
7.	Dairy Engineering workshop	260	39
8.	Office and Classroom Block for Agriculture Technology	100	15n
9.	Extension of Boys Hostel	627.18	95.57
10.	New Lecture Hall Complex	8137	850
11.	Creche (Bamboo)	685	74
12.	Multipurpose Gymnasium	702	148.55
13.	Battery Room in Dairy	41	8.5
14.	Geodesic Control Room for Renewable Energy System	200	15
	Total	19093.73	2709.82

B. New Laboratories Established

1. 5-G Testing Laboratory
2. Accounting and Taxation Laboratory
3. Agriculture and Solar Integration Laboratory on Land
4. Aptitude Testing Laboratory in Medical Camps
5. Artificial Intelligence Laboratory
6. Biodiversity Laboratory
7. Biomass Laboratory
8. Ceramic and Pottery Laboratory
9. Computer-Aided Design (CAD) Laboratory
10. Dairy Engineering Workshop
11. Dairy Technology Testing Laboratory

12. *Digital Manufacturing Laboratory*
13. *Food Laboratory*
14. *Geo-Technology Laboratory*
15. *Geomatics Laboratory*
16. *Internet of Things Laboratory*
17. *Paper Recycling Laboratory*
18. *Performing Arts Laboratory*
19. *Power System Protection Laboratory*
20. *Puppetry Laboratory*
21. *Renewable Energy Laboratory*
22. *Robotics Laboratory*
23. *Smart Greenhouses*
24. *Solar Agriculture Farm*
25. *Structural Analysis Laboratory*
26. *Sustainability Laboratory*
27. *Tourism and Hospitality Management Laboratory*
28. *Transportation Laboratory*
29. *Value-Addition Laboratory*
30. *Visual Arts Laboratory*
31. *Waste and Recycling Laboratory*
32. *Waste Management and Nano Enterprises Laboratory*
33. *Yoga Centre*

C. New Equipment Installed

<i>3D Printer Kit</i>	<i>Laminar Air Flow</i>
<i>Analytical Balance</i>	<i>Laminar Air Flow Hood</i>
<i>Antibiotic Residue Testing System</i>	<i>LED Projectors</i>
<i>APC 5 KVA Online UPS</i>	<i>Lithium-ion batteries</i>
<i>Backman Coulter Auto Scan</i>	<i>Mass Flow Sensor for Aethalometer</i>
<i>Baking Facility</i>	<i>MATLAB (unlimited licenses)</i>
<i>Basket Centrifuge</i>	<i>Milk Bottle Filling Plant</i>
<i>BD Bactec Blood Culture System</i>	<i>Mobile Signal booster</i>
<i>Bio Printer</i>	<i>Nanodrop</i>
<i>BOD Incubator</i>	<i>Network Analyzer</i>
<i>Bottle Washing Equipment</i>	<i>NI Equipment for Green House</i>
<i>Brain Electric Source Analysis Software (BESA)</i>	<i>NVidia CUDA Server</i>
<i>Butter Churning 150 L</i>	<i>PA System</i>
<i>CAD Software</i>	<i>Patron Traffic Counter</i>
<i>CIP On Wheels & Accessories</i>	<i>PCB Manufacturing Machine</i>
<i>CISCO ISR Router for BGP</i>	<i>Photo Copier</i>
<i>CNC Kit</i>	<i>Pneumatic telescope mobile tower</i>
<i>Connected Cars Laboratory</i>	<i>Portable Cabins</i>
<i>Cream Separator</i>	<i>Portable Sonicator</i>
<i>Dahi Making Plant</i>	<i>Precision Physical Balance</i>
<i>Dairy Engineering Workshop</i>	<i>Programmable DC Power Supply</i>
<i>Deep Freezer</i>	<i>PTZ video camera, LCD Projector</i>
<i>Design Software</i>	<i>PV Wind Hybrid System</i>

<i>Desktop 3D Scanner</i>	<i>R.O Water System</i>
<i>Desktop Computers</i>	<i>Rapid Microbiological Test Line</i>
<i>Differential Scanning Calorimeter</i>	<i>Reagents</i>
<i>Digital Duplicator</i>	<i>Real Time PCR Based Microbial Analyzer</i>
<i>Dump Tank 200 Liter</i>	<i>Rebound Hammer</i>
<i>E-view software</i>	<i>Robots (Cognitive)</i>
<i>E-Yantra lab</i>	<i>Sewage Cleaning Machine</i>
<i>Electric Boiler</i>	<i>Shrikhand/ Basundi Packing Machine</i>
<i>Electric Lawn Mover</i>	<i>Signal Generator</i>
<i>Eliza Reader</i>	<i>Smartphones</i>
<i>Fire System</i>	<i>SMPS for Aethalometer</i>
<i>Fluorescence Microscope</i>	<i>Spectrophotometer</i>
<i>Fluorescence Spectrometer</i>	<i>Spectrum Analyzer</i>
<i>Gas Chromatograph</i>	<i>SPT Accessories</i>
<i>Gateway</i>	<i>Thermomixer</i>
<i>Gel Doc System</i>	<i>Toilet Cleaning Machine</i>
<i>Ghee/Khoa Kettle</i>	<i>Track Recording System</i>
<i>Green Cooling Cum Storage Tank 200 L</i>	<i>Ultrasonic Pulse Velocity Apparatus</i>
<i>Green Pasteurizer 100 L</i>	<i>Universal Mutation Detection System</i>
<i>GSM Wireless Analyzer</i>	<i>Upgradation of 32 Channel EEG To 64 Channel</i>
<i>High end HD wireless video camera</i>	<i>Value Addition Lab</i>
<i>High-end Laptops (2)</i>	<i>Vanadium Flow Battery Pack</i>
<i>High-end Tablets (2)</i>	<i>Video Encoder</i>
<i>Homogenizer</i>	<i>Video Mixer</i>
<i>Hygiene Monitoring System</i>	<i>Virtual Classroom Set Up</i>
<i>Ice Cream Plant</i>	<i>Wireless Antenna</i>
<i>Inductively Coupled Plasma Atomic Spectrophotometer (ICPAES)</i>	<i>Western Blot Apparatus</i>
<i>Integrated IOT System (Humanoid)</i>	
<i>Inverted Pendulum</i>	
<i>IOT Kits</i>	
<i>Irrigation Pipes with Sprinklers</i>	
<i>Kiosk System</i>	
<i>Lab Equipment for Agriculture Technology</i>	

Sl. No.	Heads	2018-19 till 30.11.19 Amount in Rs. (Lakhs)
1.	Budget Allocation for Infrastructure excluding salary	10911.37
2.	Books & Journals	205.84
3.	Expenditure on Physical Facilities & Academic support	1852.41

CRITERION 5: STUDENT SUPPORT AND PROGRESSION

1. Indo-Canada MITAC Scholarships: 4 (USD 4000 each)
2. 100 per cent Financial Support for Co-op Internship Program either from Institute or Industry funds
3. Financial Assistance for GATE coaching with online and printed resource material: 200 students
4. Financial support for employability skill training from professional counsellors: 400 students
5. All students admitted to 1st year BTech were given 3-week Induction Program
6. Organized Solar Hackathon.
7. Copyright awarded for the innovative Six Sigma Qualities and Values logo.
8. No. of Students getting scholarships by govt. agencies: 783
9. No. of Students getting scholarships by Institute and other sources: 464
10. NCC Director General Commendation Award, 2018.
11. Second Best Cadet Award, UP Directorate, 2018.
12. 5 Cadets participated in RD Camps, for Republic Day Parade, 2018.
13. 5 Cadets participated in PM Rally, 2018.
14. 1 Cadet visited Kazakhstan in NCC Youth Exchange Programme, 2018.
15. 1 Cadet visited Bhutan in NCC Youth Exchange Programme, 2019.
16. 1 Cadet awarded the Chief Minister Silver Medal for Best in Drill in Inter-Group Competition, 2019.
17. Awards won in the Inter-University North-Zone Youth Festival, organized by Association Indian Universities (2018-19)
 - *Instrumental Solo Non-percussion - 1st*
 - *Western Instrumental Solo - 1st*
 - *Classical Vocal Solo - 2nd*
 - *Rangoli - Consolation*
 - *Instrumental Solo (Percussion) - Consolation*
18. Awards won in the Inter-University National Youth Festival, organized by Association Indian Universities (2018-19)
 - *Western Instrumental Solo - 2nd*
 - *Classical Vocal Solo - 3rd*
19. Alumni contribution (2018-19 till 30.11.19): > 100 lakhs

CRITERION 6 : GOVERNANCE, LEADERSHIP AND MANAGEMENT

1. Constituted a Fire Safety Committee
2. Online portal launched for Grievances
3. Constituted the Institute Innovation Council under aegis of MHRD
4. Strengthened IQAC with additional expert members from Academia and Industry
5. Strengthened the Academic and Administration Audit Committee (AAAC) with additional expert members from Academia and Industry
6. Initiated the ISO 21001:2018 certification that is currently in process
7. Completed the NBA Accreditation process for Departments of Electrical and Mechanical Engineering, result awaited.
8. Constituted Engineering Curriculum Review Upgradation Committee with external members
9. Participation in NIRF-2019 and NIRF-2020.
10. Conducted an extensive Student Perspective Survey on Impact of Activities of DEI

11. Conducted a Comparative Survey of DEI and other Institutions
12. Conducted an exhaustive Survey on Societal Impact of Institutional Activities/Features
13. Conducted an Impact Feedback Survey
14. Conducted an extensive survey on UN Sustainable Development Goals Achievement Matrix through DEI Activities and Features
15. Participated in Atal Ranking of Institutions on Innovation Achievements (ARIIA-2019 and 2020), Feedback for DEI
16. Participated in Swachhta Ranking 2019
17. No. of Teachers supported for Conferences: 41
18. Funds received from Non Govt. sources (2018-19 till 30.11.19): Rs. 265.01 lakhs

A. Green Initiatives

- Constructed a Bamboo Lecture Hall
- Constructed a Bamboo Creche for women staff
- Installed Solar tube-light natural lighting system in Guest House
- Enhanced the Solar Power capability with Battery Back-up, from 585000 kWh to a total generation capacity of 855000 kWh.
- Acquired land and established a new Bio-diversity Park in an area of 7 acres
- Established a multi climatic Green Houses
- Constructed an Amphitheatre
- Established Institute and Student Indian Green Building Council Chapters
- Construction started of Exhibition Hall and two Architecture Studios using Bamboo

B. Smart Campus Initiatives

- Smart Agriculture
- Smart Dairy Farming
- Smart Connectivity
- Smart Waste Management
- Smart Surveillance

CRITERION 7 : INSTITUTIONAL VALUES AND BEST PRACTICES

1. Installed a Waste-Paper Recycling Plant
2. Creation of Solar Agriculture Farm (2.5 Crores-DST Project) in collaboration, IIT Roorkee and University of Tromso, Norway.
3. Organized the First International Conference on Dayalbagh Science of Consciousness (DSC 2019) in collaboration with University of Waterloo, Canada, September 6, 2019.
4. Organized 250 free multi-specialty medical and assistance camps to date, with more than 1 lakh twenty one thousand footprints.
5. Contributed in NAAC compilation of Best Practices in Admission Process and Staff Development/Professional Development Activities
6. Expenditure on green Initiatives and waste management excluding salary (2018-19 till 30.11.19): Rs. 470.00 lakhs
7. Interaction with Professor Abhijit Banerjee, the 2019 Nobel Prize Winner in Economic, at New Delhi and MIT, USA.
8. Selected in Paramarsh - UGC Scheme for Mentoring NAAC Accreditation Aspirant Institutions to Promote Quality Assurance in Higher Education.

9. Several Activities with high Social and Environment Impact organized in collaboration with Society for Preservation of Healthy Environment and Ecology and Heritage of Agra (SPHEEHA) (www.spheeha.org).

10. Special Talks Organized

S.No.	Name	Title of Talk	Affiliation
1.	Prof. Joy Sen	Indian Culture and Values	IIT Kharagpur
2.	Prof. Anna Horatchek	Consciousness Values and Innovation	University of Kiel, Germany
3.	Prof. Gerd Horatchek	Psychoanalysis and Wellbeing	University of Kiel, Germany
4.	Prof. Anand Srivastav	Innovative Aspects of Maker-Breaker Game Theory	University of Kiel, Germany
5.	Mr. Sachin Sharma	Green Practices in Project Management	Director Projects, Wave
6.	Dr. Sandeep Narang	Green Buildings and their Societal Impacts	Secretary, IGBCA
7.	Prof. Sandeep Grover	Best Practices in Outcome Based Education	YMCA
8.	Prof. K. Venkateshwara Rao	Professional Ethics	Director, JNTU-ISTH
9.	Prof. T. Vijay Lakshmi	Environment Protection	JNTU-ISTH
10.	Prof. Hema Bindu	Biotechnology	JNTU-ISTH
11.	Mr. P. Subramaniam	Renewable Energy Initiatives GOI	CEO, NSEMI, India
12.	Mr. Sudhir Chandra Shekhar	Application of PV SYST in Solar Power Plant Design	CEO, EEEP Ltd.
13.	Prof. Anand Mohan	Nature: Ethos and Ethics in Vedas and Ancient Scriptures	FASc., FNASc, Registrar, DEI
14.	Mr. Anil Kumar	Climate Change and Sustainable Development	IAS, Commissioner Agra
15.	Prof. Subhash Kak	Themes of Space and Structure in India and their Contemporary Relevance	Member, PM-STIAC and Regents Prof. Oklahoma Univ., USA
16.	Mr. Gauri Shankar Ghosh	Climate Change and its effect in India Specially in water sector	IAS Retd.
17.	Mr. S. Massod Hussain	Sustainable Development and Management of Water Resources in the Country	Former Chairman, CWC
18.	Mr. R.K. Jain	Issue in Environmental Clearance of Ken Beta Link Project	Chief Engineer, NW, DA