

**DEENBANDHU CHHOTU RAM UNIVERSITY OF SCIENCE AND
TECHNOLOGY,
MURTHAL-131 039, SONEPAT. HARYANA**

UNIVERSITY BRIEF

INTRODUCTION

Deenbandhu Chhotu Ram University of Science and Technology, Murthal was established on upgradation of the erstwhile Chhotu Ram State College of Engineering in November 2006 by an Act 29 of 2006 of the Legislature of the State of Haryana with the vision “*to facilitate and promote studies and research in emerging areas of higher education with focus on new frontiers of science, engineering, technology, architecture and management studies, and also to achieve excellence in these and connected fields*”. The University has taken up a mission to achieve excellence in education and research in main and related areas of Applied Sciences, Engineering, Technology, Architecture and Management to occupy a place of pride amongst the most eminent organizations of the world. Under Amendment Act of 2009 the University was accorded status of teaching-cum-affiliating University. The University got affiliating status from the session 2011-12 and at present 24 colleges of Engineering, Technology, Management, Computer Science and Architecture, located in Sonapat District are affiliated to it. University had been declared eligible for grants under Section 12(B), of UGC Act, 1956, in March 2009. The University has 16 teaching departments/centres within its campus.

It is the community that has been responsible for establishment of the erstwhile college upgraded to the University. The land area of 273 acres was donated by the community in 1987. The University is located in NCR on National Highway No. 1 (G. T. Road) about 48 kms from ISBT, New Delhi towards Chandigarh and 8 kms from Sonapat Railway Station. The location of the University is close to some of the growing industrial estates of Haryana, Uttar Pradesh and Rajasthan with varied industrial and business enterprises. Besides presence of varied industrial estates, the region is going to transform into an educational hub with a number of educational institutions coming up in the vicinity, including Rajiv Gandhi Education City, National Institute of Food Technology and Management, Jindal Law University, Extension centre of IIT Delhi etc.

ACADEMIC PROGRAMMES CONDUCTED

Former college started with two programmes in Engineering and Technology with affiliation with another Technical University of the State, Guru Jambheshwar University, and later Mahrishi Dayanand University, Rohtak. Programmes continued to be expanded both vertically and horizontally beyond Engineering and Technology. Details of the programmes taken up at different stages are indicated. College had eight UG and four PG programmes conducted at the time it was upgraded to the University.

UG PROGRAMMES				
	Year Started	Courses Available	Intake at Start	Intake at present 2016-17

1	1987	Mechanical Engg.	30	72
2	1987	Electronics and Comm.Engg	30	72
3	1989	Electrical Engg.	45	72
4	1989	Comp.Sc and Engg.	30	72
5	1990	Chemical Engg.	15	72
6	1991	Architecture	30	80
7	2004	Bio-Technology	30	72
8	2004	Bio-Medical Engg.	30	72
9	2009	Civil Engineering	60	72
				656
PG PROGRAMMES				
10	2003	Electrical Engineering (I&C)	18	18
11	2003	M.Tech Mechanical Engineering	18	36
12	2003	MBA	60	90
13	2006	Electronics and Communication Engineering	18	36
14	2009	Electrical Engineering (Power Systems)	30	36
15	2009	Computer Science and Engineering	30	36
16	2009	Chemical Engineering	18	18
17	2009	Architecture	18	20
18	2009	Energy and Environmental Studies	18	18
19	2009	M.A. (English)	30	30
20	2009	M.Sc. Chemistry	40	50
21	2009	M.Sc. Physics	40	50
22	2009	M.Sc. Mathematics	40	50
23	2010	Materials Science and Nano-technology.	18	18
24	2010	Bio-Technology	18	18
25	2010	Bio-Medical Engineering	18	18
26	2011	M.Sc. (Biotechnology)	30	30
27	2012	Hospital Administration	36	36
28	2012	Urban and Rural Planning	20	20
29	2014	Construction and Real Estate Management	18	18
30	2014	VLSI	18	18
31	2014	M.Tech. in Food Technology	18	18
32	2014	PG Diploma in Forensic Biotechnology	15	15
33	2014	M.Tech. (Highway Safety and Engineering)	18	18
34	2015	M.Tech. Renewable Energy	18	18
35	2016	M.Sc. (Environmental Science)	18	18
				751
INTREGATED PROGRAMMES				
36	2012	MBA	60	90
37	2012	Mathematics	40	50
				140

Career-Oriented Programmes

Regular programmes are addressed adequately through curricular revision and the career options are made wider through Career-Oriented programmes conducted by the University. The programmes conducted are through assistance from the University Grants Commission. Three programmes being run at present are Energy Conservation and Use of Non-conventional Sources of Energy, Remote Sensing/ GIS and Repairing of Hospital Equipment.

Looking to the demand in the marketplace University had started a number of Part-time programmes conducted through weekend classes. Besides higher coverage of the geographical area of the University it imparted professionalism to the programmes with working professionals forming major chunk of the persons taking up these courses. These had the advantage of higher contact hours for the students who invariably had long professional experience at their back obviating the need for exposure to industry etc. These programmes were not approved by All India Council of Technical Education (AICTE) on the plea that these did not fit into their format and had to be discontinued. Some of the programmes (marked *) were, later, converted to regular programmes.

DEPARTMENT	COURSE	YEAR STARTED	PRESENT INTAKE
Electrical Engineering	B.Tech. (Weekend)	2010	66
Mechanical Engineering	B.Tech. (Weekend)	2010	66
Electronics and Communication Engineering	B.Tech. (Weekend)	2010	66
	M.Tech. (Weekend)	2011	36
Computer Science and Engineering	B.Tech. (Weekend)	2010	66
	M.Tech. (Weekend)	2011	36
Architecture	MURP*	2010/ 2012	30 (WE)/20 (Reg)
Civil Engineering	B.Tech. Weekend	2010	66
Management Studies	Hospital Administration*	2010/2012	36

Besides regular and other programmes, as indicated above, skill development programmes have also been taken up. University is registered as a Skill Knowledge Provider under the National Programme conducted under the aegis of All India Council for Technical Education (AICTE), Janpath, New Delhi. With the expertise available University had registered for following of the programmes with corresponding Nodal Officers from faculty of the University. Details are as given below:

Scheme	Sub-Schemes	Persons Nominated
Automobiles	Engine Testing Vehicle Testing Vehicle Quality Auto Electricals and Electronics Farm Equipment and Machinery	Dr. Avadhesh Kumar Sharma Shri H.K. Agarwal
Information Technology	Software Development	Smt. Darshana Hooda

Telecommunications	Mobile Communication	Shri Rajeshwar Das
Agriculture	Renewable Energy	Dr. Anil Kumar Berwal

Under the different Schemes launched separately by UGC and AICTE programmes being run for award of degree of B.Voc. are in five areas including civil engineering, marketing etc.

INFRASTRUCTURAL FACILITIES

273 acres of land in rural environment forms the base for high intellectual and physical development of the students. For ensuring development of all the faculties of the students it is imperative that curricular, co-curricular and extra-curricular activities are planned with the objective of overall development of the students developing in them qualities that help them face the world not only from competition in the technical field but with capacity to work under the circumstances found in diverse areas of industry, business, research etc. and with necessary implications of Corporate Social Responsibility. Details of the infrastructural facilities available in the University to deal with all these aspects are as under:

Physical Infrastructure

SERIAL	BUILDING	COVERED AREA (Sq.M.)	USE	TOTAL	PLINTH AREA
1	Sarvepalli Radhakrishnan Hall		Administrative Block	3992	1996
	Ground floor	1996			
	First floor	1996			
		3992			
2	J.C. Bose Block		Teaching Block	6681	2227
	Ground floor	2227			
	First floor	2227			
	Second floor	2227			
		6681			
3	C.V. Raman Block		Teaching Block	6081	2027
	Ground floor	2027			
	First floor	2027			
	Second floor	2027			
		6081			
4	Vikram Sarabhai Block		Teaching Block	4056	1352
	Ground floor	1352			
	First floor	1352			
	Second floor	1352			
		4056			
5	M. Vishveshvariya Block		Teaching Block	13820	3500
	Ground floor	3500			
	First floor	3400			
	Second floor	3400			
		3400			

	Mumty	120			
		13820			
6	Workshop	5436		5436	5436
7	Library and Computer Centre			12479	3348.6
	Basement	454			
	Ground floor	3348.6			
	First floor	2910.5			
	Second floor	2698.5			
	Third floor	2910.5			
	Terrace	156.91			
		12479.01			
8	Auditorium (Nearing completion)			7470	2490
	Ground floor	2490			
	First floor	2490			
	Second floor	2490			
		7470			
9	Swagat		Guest House	1670	710
	Ground floor	710			
	First floor	480			
	Second floor	480			
		1670			
10	Sushruta	630	Health Centre	630	630
11	Shopping Centre			796	398
	Ground floor	398			
	First floor	398			
		796			
12	K.S. Krishnan Hall		Boys' Hostel	5995	2599
	Ground floor	2599			
	First floor	1698			
	Second floor	1698			
		5995			
13	Chandrashekhar Hall		Boys' Hostel	5995	2599
	Ground floor	2599			
	First floor	1698			
	Second floor	1698			
		5995			
14	Hargobind Khurana Hall		Boys' Hostel	5995	2599
	Ground floor	2599			
	First floor	1698			
	Second floor	1698			
		5995			
15	Aryabhat Hall		Boys' Hostel	3448	1750
	Ground floor	1750			
	First floor	849			
	Second floor	849			
		3448			
16	Aryabhat Hall B Block		Boys' Hostel	2547	849
	Ground floor	849			

	First floor	849			
	Second floor	849			
		2547			
17	Gargi Hall		Girls' Hostel	7000	3500
	Ground floor	3500			
	First floor	3500			
		7000			
18	Gargi Hall (Extension nearing completion)		Girls' Hostel	6015	2343
	Ground floor	2343			
	First floor	1836			
	Second floor	1836			
		6015			
19	Kalpana Chawla Hall		Girls' Hostel	7656	3163
	Ground floor	3163			
	First floor	2307			
	Second floor	2186			
		7656			
20	Residential buildings			15374	15374
	V.C. Residence	625			
	A-1 House (2160 Sq.Ft area)-1	201			
	B- Type House (1882 Sq.Ft area)-16	2797			
	C-Type House (1220 Sq.Ft area)-74	8388			
	D-type House (770 Sq.Ft area)-20	1717			
	E-Type House (660 Sq.Ft area)- 12	669			
	F-Type House (440 Sq.Ft area)-8	327			
	G-Type House (350 Sq.Ft.)-19	650			
		15374			
21	Area added during the period between December, 2011 and 2012. Construction Division: 1000			1000	1000
22	Shopping Complex			124136	59890.6
	Ground floor	400			
	First floor	400			
	Extension	460		1260	860
				125396	60750.6
23	Quarters	B-6			0
2012-13		C-8			0

		D-4			0
		E-8			0
		G-1	2448 Sq. M		2448
	Shopping Complex-II		412		412
	Tissue Culture Laboratory		100		100
				128356	0
Student Activity Centre			3000	131356	3000
					67570.6

Details of the facilities established are as under:

Saraswati Library Complex

Spread over an area of 12479Sq.M houses Library, University Computer Centre and department of Management. This four-storey building is a star building of University with a total covered area as above indicated. Facilities available are:

University Library

The Library has installed Online Public Access Catalogue ((OPAC) system for locating books. There is a separate collection under “book bank” providing for facilities to SC students. Over 60,000 books with over 23000 titles are arranged as per the call number of the books by Dewey Decimal Classification Scheme 22nd Edition. For cataloguing LibEase Software based on AACR-II is used. A separate 'Reading Hall' remains open for reading for 24x7. Library has its own Seminar Hall of 100 seating capacity equipped with audio-visual aids. Services available in the library include reprographic services, Audio-Video Library and cubical facilities for research scholars.

University Computer Centre

The Centre has a capacity to house 250 computers, a server room, power room, hardware maintenance cell, NPTEL lab, online lecture room, Aakash research lab and offices. It manages the Central Computing and Networking facilities for the University community. The UCC has dedicated 1GB NKN connectivity line for Internet access from BSNL under the NMEICT project of MHRD. University has around 1200 Nodes Wired Network in academic area and also Wi-Fi connectivity in all Hostels over 10Gbps backbone. University is designated as Aakash Project Research Centre of IIT Bombay and has more than 250 Aakash II tablets for the faculty and students to carry out research for upgradation of "Aakash" features or development of education content. Centre is equipped with more than 200 desktops, 25 laptops, 3 Itanium servers, 250 Aakash Tablets, one large size Plotter, Xerox machine, LCD projectors, Scanners and Laser printers. The Centre has state-of-the-art audio visual facilities to conduct various online lectures and training programmes. NPTEL video lectures are available for students/faculty through university intranet. UCC has large number of latest licensed software and is a part of AICTE initiative "Office365".

Teaching Blocks

Teaching activities are conducted in four teaching blocks with total covered area of around 30,000 sq.m. Details are as under:

Block	Covered area (sq.m)
J.C. Bose Block	6681
C.V. Raman Block	6081
Vikram Sarabhai Block	4056
M. Vishveshavariya Block	13820

Hostels

University provides cubicle accommodation in its four Boys Hostels with 276 rooms in each. There are three Girls Hostels with a capacity of 100, 288 and 229 rooms respectively. There is a mess-cum-kitchen unit in each hostel, which is run by a students' body on cooperative basis. A council of wardens headed by Chief Warden deals with the policy affairs related to hostels. Every hostel has a spacious furnished common room with TV and telephone connection, a billiards room, a table tennis and a badminton court. The hostels are linked with Wi-Fi system. All the important zones in the hostels are under CCTV surveillance.

Hostel	Rooms	Students Accommodated
Krishnan Hall (Boys)	276	349
Chandrashekhar Hall (Boys)	276	312
Har Gobind Khurana Hall (Boys)	276	308
Arya Bhatta Hall (Boys)	276	304
Gargi Hall (Girls)	100	126
Kalpana Chawla Hall (Girls)	288	376
Mother Theresa Hall (Girls)	229	234

Convention Centre

Work of construction of a state-of-the-art Convention Centre is in progress and is expecting to be completed soon.

Central Instrumentation Laboratory (CIL)

There are number of educational institutions and industries in surrounding area but no significant instrumental facilities are available where academicians/ researchers/ technologists can get help and support for their analytical needs. CIL was established in the year 2011 with this end in view. The expertise required for operation and maintenance of instruments is available with CIL.

Centre for Research Innovation and Development (CRID)

CRID has been established with a vision to collaborate with the industry, to undertake cross-functional research and developmental projects, while developing a symbiotic setup leveraging

competencies of both industry and academia. It will provide for an incubation centre to cultivate innovative ideas, grooming of budding engineers, scientists and entrepreneurs, leading to improvement in existing technologies and development of futuristic ones.

University Test House (UTH)

UTH has been established with a view to provide extensive testing facilities for industries. At present, UTH provides consultancy and testing facility in the areas of civil works, water testing etc. The UTH follows the BIS and ASTM standards for testing of materials.

Regional Test Centre

Ministry of New and Renewable Energy, Government of India has approved establishment of the Test Centre within the University for a period of two years with the objective of testing and quality control services for solar thermal devices/ systems for promoting widespread utilisation of solar energy in the country.

Academic Areas

Details of the academic areas for execution of different academic programmes in respect of laboratories, classrooms etc. are as under:

Details		Covered Area (sq.m)
Item	Number	
Class rooms	52	4487
Laboratories	56	4460
Seminar halls	14	1817
Drawing halls	9	1860
Studio	4	440
Computer centre	1	3000
Workshop	1	5436
Library	1	4552
Central instrumentation laboratory	1	400
Test house	1	500
Energy test centre	1	160
Tissue Culture Lab	1	100
Total		27112

Medical Services

Sushruta (Health) Centre of the University has been established with adequate provision of the needed medical and para-medical resources. Emergency services include an ambulance, available round-the-clock, equipment for pathological investigation, first-aid room etc. Two medical officers, one male and one female, are available for service to the students and others within the campus.

Infrastructure: Faculty and Staff

There are, in all, 174 regular faculty positions, including three personnel assigned for sports activities. This being against the total sanction of the positions at 386. Though there is shortage of faculty positions practically in all the departments but in some departments cadre position is also not satisfactory. Table below gives the position which indicates a strong faculty in so far as over 50% of the faculty positions have Ph.D. as the highest qualification and most of the faculty, with PG as the highest qualification, are pursuing to acquire higher qualifications through research.

	Professor						Associate Professor						Assistant Professor							
	Ph.D.		PG		UG		Ph.D.		PG		UG		Ph.D.		PG		UG			
	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
ARCHITECTURE	2	1	0	1	0	0	0	1	1	1	1	0	0	0	0	3	3	0	0	13
BIOMEDICAL ENGINEERING	0	0	0	0	0	0	0	0	0	0	0	0	1	0	3	2	0	0	6	
BIOTECHNOLOGY	0	1	0	0	0	0	1	1	0	0	0	0	3	2	0	0	0	0	8	
CENTRE OF EXCELLENCE IN ENERGY AND ENVIRONMENTAL SCIENCE	0	0	0	0	0	0	0	1	0	0	0	0	2	1	2	0	0	0	6	
CHEMICAL ENGINEERING	0	1	0	0	0	0	0	0	0	0	0	0	2	0	2	3	0	0	8	
CHEMISTRY	1	2	0	0	0	0	1	0	0	0	0	0	1	4	0	1	0	0	10	
CIVIL ENGINEERING	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	7	0	0	10	
COMPUTER SCIENCE AND ENGINEERING	1	0	0	0	0	0	1	1	0	0	0	0	1	2	3	4	0	0	13	
ELECTRICAL ENGINEERING	0	3	0	0	0	0	0	2	0	1	0	1	0	4	1	6	0	0	18	
ELECTRONICS AND COMMUNICATION ENGINEERING	0	2	0	0	0	0	1	0	0	0	1	2	1	2	6	3	0	0	18	
DEENBANDHU CHHOTU RAM CHAIR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
HUMANITIES	2	0	0	0	0	0	0	0	1	0	0	0	0	2	0	1	0	0	6	
MANAGEMENT STUDIES	0	1	0	0	0	0	0	2	0	0	0	0	4	3	1	2	0	0	13	
MATERIALS SCIENCE AND NANO-TECHNOLOGY	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	3	
MATHEMATICS	0	5	0	0	0	0	0	1	0	0	0	0	0	4	1	1	0	0	12	
MECHANICAL ENGINEERING	0	8	0	0	0	0	0	3	0	0	0	0	0	4	0	2	0	0	17	
PHYSICS	1	3	0	0	0	0	0	1	0	0	0	0	0	3	1	1	0	0	10	
SPORTS	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	
	7	29	0	1	0	0	5	14	2	3	1	4	11	24	27	44	1	1	174	
		36				37		19				29		35					108	

Non-teaching positions are 239 against a sanctioned strength of 463. There thus being shortage in all categories of the teaching and non-teaching positions but the jobs are not permitted to suffer through engagement for the positions on contract.

RESEARCH AND CONSULTANCY

Research is considered an integral part of the teaching-learning process particularly in the current scenario where technological changes are taking place by the hour and where one may face obsolescence in case one does not keep update with the developments taking place and markets shrinking and becoming more competitive. University lays stress on the faculty members to undertake research in their basic and allied areas to ensure that they discharge their responsibility towards students helping them develop confidence to face the diverse situations they may be called upon to face after campus.

Faculty positions are not only encouraged to undertake research projects but have exhibited their capability to undertake consultancy services. Details of the research and consultancy projects undertaken by the faculty positions within the last three years are as indicated below.

Consultancy Projects

Financial Year	Name of faculty (Chief Consultant)	Client Organization	Title of Consultancy of project	Amount received (in Rupees)
2015-16	1 Chairperson	Municipal corporation yamunanagar	Proof checking of Structural Design	32490
	2 Chairperson	HUDA Div Sonapat	Mix Design	17100
	3 Chairperson	SDE HUDA Sonapat	Desgn of Community Centre	28500
	4 Chairperson	HSIIDC Ltd	Proof checking of Structural Design	11326
	5 Chairperson	Municipal corporation Gurgaon	Design of welcome gate	28090
	6 Chairperson	SDE HUDA Sonapat	Design of underground water tank	44944
	7 Chairperson	PHED	Third Party Inspection	995468
	8 Chairperson	gram panchayat Tajpur	Design of chaupal	22472
	9 Chairperson	HUDA and B & R	Design of Pavement	28,090
	10 Chairperson	HUDA. PANIPAT	Overlay Design	17,175
	11 Prof.Rajbir Singh, Dr. S.N. Mahapatra, Dr.Satpal	DRDA Gurgaon, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in district	95000
	12 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	WSSO, Govt. of Haryana	Support Organization – National Water Security Pilot Programme, Kaithal (Haryana)	1397504
	13 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	DRDA YamunaNagar , Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in YamunaNagar district	147000
	14 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	DRDA Kaithal , Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in Kaithal district	148500

	15 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Aarti, Dr. Manisha, Mrs. Vandana Sharma, Dr.Satpal, Dr.Jitendra Kumar, Dr.Rupa Rathee, Dr.Anju	DRDA Sonipat, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in Sonipat district	400000
	16 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr. Satpal	PHE Department, Govt. of Haryana	Evaluation Studies for Water Supply Schemes under National Rural Drinking Water Programme for Jhajjar district	1107600
2014-15	1 Chairperson	HUDA and B & R	Design of Pavement	62,922
	2 Chairperson	SDE HUDA Sonapat	Culvert design	84548
	3 Chairperson	SDE HUDA Kurukshetra	Boundry wall design	11535
	4 Chairperson	SDE HUDA Sonapat	Bridge design	237099
	5 Prof.Rajbir Singh, Dr. S.N. Mahapatra, Dr.Satpal	DRDA Gurgaon, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in district	190000
	6 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	WSSO, Govt. of Haryana	Support Organization – National Water Security Pilot Programme, Kaithal (Haryana)	756489
	7 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	DRDA YamunaNagar , Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in YamunaNagar district	147000
	8 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	DRDA Kaithal , Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in Kaithal district	148500
	9 Prof.Rajbir Singh,Dr.Rupa Rathee	DRDA Panchkula, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in Panchkula district	162500
2013-14	1 Chairperson	Govt and Private Organization	Testing of Materials	1600000
	2 Chairperson	Govt and Private Organization	Design and Analysis	385000
	3 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	WSSO, Govt. of Haryana	Support Organization – National Water Security Pilot Programme, Kaithal (Haryana)	503966
	4 Prof.Rajbir Singh, Dr. S.N. Mahapatra, Dr.Satpal	DRDA Gurgaon, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in district	475000
	5 Prof.Rajbir Singh,Dr.Rupa Rathee	DRDA Panchkula, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in Panchkula district	162500

6 Prof.Rajbir Singh, Dr. Anil Khurana, Dr.Rupa Rathee, Dr.Satpal	DRDA YamunaNagar , Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in YamunaNagar district	300000
7 Prof.Rajbir Singh, Dr. Anil Khurana, Dr. S.N. Mahapatra, Dr. Anju Singhroha, Dr.Aarti, Dr. Manisha, Dr.Rupa Rathee, Mrs. Vandana Sharma, Mr. Anand Chauhan, Dr.Satpal, Mr. Pankaj Kumar, Mr. Parveen Kumar, Dr.Jitendra Kumar	DRDA Rohtak, Govt. of Haryana	Preparation of Five year Perspective Plan for implementation of NREGA in Rohtak district	20000

Research Projects

Financial Year	Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned order no.	Sanctioned date	Amount Received (In Rupees)
2015-16	1 Dr. Nisha Kumari	UGC	Analysis of Hybrid Energy Systems Applicable to a University Campus	No. F.20-7(5)/2012 (BSR)	30th March, 2013	540,000
	2 Dr. Amita Malik	UGC	Investigation on Swarm Intelligence based coverage hole detection for WSNs	41-626/2012(SR)	18th July, 2012	16000
	3 Dr.Ashok K. Sharma	UGC, New Delhi	Nanostructured composites as electrode materials for electrochemical energy storage	F.No. 42-345/2013(SR)	March. 25,2013	355200
	4 Dr. JS Rana ,Bio- Tech.	UGC, N.Delhi	UGC Postdoctoral fellowship to women on Electrochemical Immunosensor for Quick Detection of	15-1/2015-17/PDFWM-2015-17-HAR-34027	12.10.2015	PDF Scholarship

		HIV using Nanomaterials			
5 Dr. JS Rana Bio -tech	CSIR, N.Delhi	CSIR New Delhi Research Associateship on Mapping of genes of Flag leafless mutant of diploid wheat (<i>Triticum monococcum</i>)	SORF.PM/035/2015/01	03.08.2015	PDF Scholarship
6 Dr. Suman Lata ,Chemistry	University Grants Commission, New Delhi	To study and develop some naturally occurring substances as corrosion inhibitors for mild steel/steel	42-292/2013(SR)	25.03.2013	80,000
7 Prof. Rekha, Humanities	UGC	Celebrating Goddess: A Socio-Cultural Study of <i>Sanjhi & Durga Puja</i>	F.NO.5-549/2012 (HRP)	22-08-2012	36022
8 Dr. S. K. Singh/ Dr. Vinod Kumar, Physics	UGC, New Delhi	Design and development of electric power generator using ferrofluid bearing	F. No. 39-500/2010(SR)	04/09/15	352720
9 Dr. S. K. Singh Physics	MNRE, Govt. of India	Settimng up of Centre of Excellence for 'Renewable Energy Test Centre'	F.No. 7/3/2012-13/ST	08/07/15	911000
10 Dr. S. K. Singh Physics	DST, Govt. of Haryana	Settimng up of Centre of Excellence for 'Renewable Energy Test	S&T/2015/2812	07/09/15	453359

			Centre'			
2014-15	1 Dr. S. K. Singh Physics	DST, Govt. of Haryana	Settimng up of Centre of Excellence for 'Renewable Energy Test Centre'	S&T/2015/2812	07/09/15	453359
	2 Dr. Satya Pal Nehra	University Grants Commission, New Delhi	Fabrication and Characterization of Thin Films Solar Cells	No. F.5-46/2014(IC)	1st Oct, 2014	2500000
	3 Dr. Suresh Verma	Twinning programme, department of biotechnology , Govt of India	Design of artificial hand and artificial finger	BCIL/NER-BPMC/2014-880	01-Sep-14	3278000
	4 Dr.Ashok K. Sharma	DST, New Delhi	Polymer Composites as Advanced Electrode Materials for Supercapict or	DST/TSG/P T/2009/116	16.11.2011	250000
	5 Dr.Surender Duhan	UGC, New Delhi	Preparation and characterizat ion of silver nano particles for humidity sensing application	41-997/2012(S R)	Feb.11,2015	258592
	6 Dr Sumit Kumar, Chemistry	DST-India	Design and Synthesis of PH-Responsive Dendritic Amphiphiles	SR/FT/CS-100/2011	15.06.2012	250000
	7 Prof. Rekha, Humanities	UGC	Celebrating Goddess: A Socio-Cultural Study of <i>Sanjhi & Durga Puja</i>	F.NO.5-549/2012 (HRP)	22-08-2012	194400

	8 Dr. Satish Kumar, Physics	UGC-New Delhi	EPR & Electrical Work Properties Of Oxide Materials	MRP F. No. 40-461/2011(SR)	10/09/14	472718
	9 Dr. Pardeep Singh, Physics	UGC, New Delhi	Study of charge exchange reactions	F5-57/2013 (IC)	05/03/15	134847
	10 Dr. S. K. Singh, Physics	DST, Govt. of Haryana	Settimg up of Centre of Excellence for 'Renewable Energy Test Centre'	S&T/2014/541	04/04/14	700000
2013-14	1Dr. Sudesh Chaudhary	UGC	Assessment of air quality for toxic elements in industrial area in national capital region & its environmental implications			600000
	2 Dr. Satya Pal Nehra	DST, Indo-German Science and Technology Center and Max Planck Society, Germany	Preparation and Characterization of Semiconductor Photocatalysts for Surface Reaction Dynamics Study and their Applications	IGSTC/MPG/FS(SPN) 2013/151	6th March, 2014	1200000
	3 Dr. Parvinder Singh	UGC	Development of a Model for Secured Communication	41-643/2012(SR)	16th July,2012	505000
	4 Dr. Amita Malik	UGC	Investigation on Swarm Intelligence based coverage hole detection for WSNs	41-626/2012(SR)	18th July, 2012	625000

5 Dr. Naresh Kumar	University Grants Commission	UGC-BSR Research Start-Up Grant for Newly Recruited Faculty at Asstt. Prof. Level	F.20-8(5)/2012(B SR)	31.03.2013	540000
6 Dr. A.k.sharma	UGC	Design and development of an improved biomass (multi-flow) gasifier for the use of 5kw engine	F. No. 39-909/2010 (SR)	06-Jan-11	857800
7 Dr. Suresh Verma	DST, Ministry of science and technology, Govt of india	Design of smart FES system for physically challenged person	IDP/MED/27/2010	24-Feb-12	4291200
8 Dr.Ashok K. Sharma	UGC, New Delhi	Nanostructured composites as electrode materials for electrochemical energy storage	F.No. 42-345/2013(SR)	March. 25,2013	687800
9 Dr. Satpal, Dr. Rupa Rathee	UGC, New Delhi	Women entrepreneurship: A study of contribution, challenges and potential	UGC-F.No. 5-350/2013(HRP)	13-Apr-13	398600
10 Dr. JS Rana, B.T	UGC innovative programme	PG Diploma in Forensic Biotechnology (one year) UGC innovative programme	14-38/2013	08.04.2015	4300000
11 Dr. JS Rana, B.T.	Ministry of Food Processing Industries, Govt. Of India & Department of Industries & Commerce, Govt. Of	Degree course in Food Processing Technology	3842-A	18.03.2013	3750000

	Haryana				
12 Dr. Dharmender Kumar, B.T.	UGC, N.Delhi	Molecular characterization & genetic diversity of lindane degrading bacteria from environment	42-449/2013(SR)	12.03.2013	986000
13 Dr. Suman Lata, Chemistry	University Grants Commission, New Delhi	To study and develop some naturally occurring substances as corrosion inhibitors for mild steel/steel	42-292/2013(SR)	25.03.2013	1070000
14 Dr. Dinesh Kumar, Chemistry	University Grants Commission, New Delhi	Synthesis and Luminescent Properties of Some Inorganic Phosphors	F.20-5(5)/2012(BSR)	08.03.2013	540000
15 Prof. Rekha, Humanities	UGC	Celebrating Goddess: A Socio-Cultural Study of <i>Sanjhi & Durga Puja</i>	F.NO.5-549/2012 (HRP)	22-08-2012	451100
16 Dr. Pardeep Singh, Physics	UGC, New Delhi	Study of charge exchange reactions	F5-57/2013 (IC)	24/07/2013	2298884

Placements

While the projects for faculty indicate the quality of the teachers but the product that they groom and nurture, students, indicate the extent results are apparent their placements after campus.

Details of the placements for the last three years are indicated below:

Academic Year	Name of the Company	No of students recruited	Minimum salary Offered	Maximum salary offered	Average salary offered	Median salary offered
2015-16	1 TCS	172	333000	350000	350000	333000

	2 Daffodil Software	6	300000	300000	300000	300000
	3 IGATE, PIET	1	315000	315000	315000	315000
	4 HMBS	1	775000	775000	775000	775000
	5 Tech Mahindra	17	307000	307000	307000	307000
	6 Fidelity	7	475000	475000	475000	475000
	7 Lava International	4	420000	420000	420000	420000
	8 Lybsis Ltd.	1	450000	450000	450000	450000
	9 Oxyent	2	550000	550000	550000	550000
	10 Idea Cellular	1	350000	350000	350000	350000
	11 Daikin Airconditioning	1	550000	550000	550000	550000
	12 Fiserv India	2	300000	300000	300000	300000
	13 PORTEA	4	330000	330000	330000	330000
	14 ISHRAE	2	450000	450000	450000	450000
	15 JOSH TECH.	1	600000	600000	600000	600000
	16 Spade Infotech	2	360000	360000	360000	360000
	17 Jindal Stainless Steels (Hisar)	7	520000	520000	520000	520000
	18 Oxyent Tech.	3	480000	480000	480000	480000
	19 Mindlance Tech.	4	300000	300000	300000	300000
	20 JSG Innotech Pvt. Ltd.	1	180000	180000	180000	180000
	21 Talent4Assure	1	300000	300000	300000	300000
	22 JSG Infotech Pvt. Ltd.	1	180000	180000	180000	180000
2014-15	1 TCS	124	318000	336000	327000	318000
	2 VIRTUSA at PIET	2	330000	330000	330000	330000
	3 L & T Company at PIET	1	377000	377000	377000	377000
	4 Isgec Heavy	3	403000	403000	403000	403000
	5 Tech Mahindra	30	307000	307000	307000	307000
	6 Honda Cars India Pvt. Ltd.	2	450000	450000	450000	450000
	7 Westline Ship Management	6	1800000	1800000	1800000	1800000
	8 Audio Text Solution (2014 batch)	2	216000	216000	216000	216000
	9 Dorf Ketal Chemicals	1	270000	270000	270000	270000
	10 Collabera	4	180000	270000	225000	180000
	11 Indian Army (HIT)	11	780000	780000	780000	780000
	12 Fidelity	10	450000	450000	450000	450000

	13 TCFoff Campus, Karnal	6	318000	334000	326000	318000
	14 Johnson Control	4	350000	350000	350000	350000
	15 Yamaha Motord Solution India Pvt. Ltd.	3	320000	320000	320000	320000
	16 Akash Educational Services Ltd.	1	570000	570000	570000	570000
	Cummins India	1	415000	415000	415000	415000
	Aricent (PIET)	1	350000	350000	350000	350000
	17 DENSO	3	240000	240000	240000	240000
	18 Jindal Saw Ltd.	3	300000	300000	300000	300000
	19 Walt Disney	1	300000	300000	300000	300000
	20 Spade Infotech	2	320000	420000	370000	320000
	21 Snapdeal	4	675000	675000	675000	675000
	22 Global Logic	3	400000	400000	400000	400000
	23 Jet Synthesys	1	500000	500000	500000	500000
	24 Jindal Stainless Ltd.	5	525000	525000	525000	525000
	25 RIVIGO	1	273000	273000	273000	273000
	26 Audio Text Solution (2014 batch)	2	216000	216000	216000	216000
	27 We Mark India	2	0	0	0	0
	28 TCFoff Campus, Karnal	1	318000	334000	326000	318000
	29 Yamaha Motord Solution India Pvt. Ltd.	1	320000	320000	320000	320000
	30 IDBI Federal	10	220000	220000	220000	220000
	31 Wipro at GVM	1	180000	180000	180000	180000
2013-14	1 Samsung Engineering	1	448000	448000	448000	448000
	2 TCS	111	318000	336000	327000	318000
	3 Innova Lab	5	180000	180000	180000	180000
	4 ISGEC YNR	2	403000	403000	403000	403000
	5 Trident Group	2	900000	900000	900000	900000
	6 Daffodil Software	2	280000	280000	280000	280000
	7 JSW Steel	2	375000	375000	375000	375000
	8 Indian Army	17	780000	780000	780000	780000
	9 ISGEC Noida	4	355000	355000	355000	355000
	10 SAP Lab	1	300000	300000	300000	300000
	11 Tech Mahindra	15	307000	307000	307000	307000
	12 S.K. Engg. & Const.	3	571000	571000	571000	571000
	13 American	2	375000	375000	375000	375000

International Group						
14 HCL	1	240000	240000	240000	240000	240000
15 Link House Build Wells Pvt. Ltd.	7	600000	600000	600000	600000	600000
16 Cognizant	2	300000	300000	300000	300000	300000
17 Samsung Engg.	1	402000	402000	402000	402000	402000
18 Omics Group	6	204000	204000	204000	204000	204000
19 Fidelity	5	400000	400000	400000	400000	400000
20 Dorf Ketal Chemical (India) Ltd.	2	270000	270000	270000	270000	270000
21 Relaxo Footwear	6	264000	264000	264000	264000	264000
22 Akash Educational Services Ltd.	3	570000	720000	645000	570000	570000
23 NCCB	2	420000	420000	420000	420000	420000
24 Re-Max	6	180000	180000	180000	180000	180000
25 District Administration	13	0	0	0	0	0
26 Affinia Mat	3	180000	180000	180000	180000	180000
27 YAMAHA	1	300000	300000	300000	300000	300000
28 BSES Ymuna Power	6	375000	375000	375000	375000	375000
29 HCL Technology	4	180000	180000	180000	180000	180000
30 YAMAHA Noida	1	350000	350000	350000	350000	350000
31 DENSO, Gurgaon	2	240000	240000	240000	240000	240000
32 Sparrow Interactivw o/c	1	300000	300000	300000	300000	300000
33 Benjamin West India Ltd.	3	300000	400000	350000	300000	300000
34 HDFC	8	180000	180000	180000	180000	180000

QUALITY CONSIDERATIONS

University wishes to bring the curricular activities at par with some of the best in the world. With this object in view an International Affairs Cell has been established in the University for dealing with all the international activities of the University. The main aim of this cell is to finalize policy of admission to international students. This Cell also explores the possibilities of entering into Memorandum of Understanding (MoU) / Exchange programmes with foreign universities. In this endeavor the Cell has been successful in having MoUs executed with the following institutions/ universities:

1. Tampere University of Finland

2. University of Applied Science, Hochschule Ostwesfalen- Liffe, Detmold, Germany.
3. Daeduk University, 48, Jang-dong, Yusong-gu, Daejeon, South Korea-305-715.
4. North Dakota State University, USA

In June-2012 a delegation of four members headed by the then Vice Chancellor, visited the universities mentioned at Sr.1-3 above for exploring further possibilities regarding faculty and student exchange programmes and for other staff of the University. In this endeavour, there is a provision of sending three to four students of Department of Architecture to attend a summer training programme in Germany every year.

With a view to have peer relations with universities/ institutions at national and international level University has been accorded membership of the following bodies:

- Association of Indian Universities
- Association of Commonwealth Universities
- International Road Federation
- Life member of Indian Concrete Institute and its Student Chapter
- Chapters of some professional bodies have been established within the University.

University considers quality as the base for all the activities and in line with the standards set by international organizations. Internal Quality Assurance Cell is functional in the University right from 2009. University had been considered competent to take up Technical Education Quality Improvement programme of the World Bank. It had successfully implemented Phase-1 of the programme and has since been assigned Phase-2 of the programme, which is being implemented at present. With that in view, and to provide an in-built mechanism for sustained improvement, University has taken up the job of accreditation of the programmes from different agencies. Eight B.Tech. programmes of the University had been accredited by National Board of Accreditation (NBA). Applications for re-accreditation of these programmes had been made. Status of accreditation by National Board for Accreditation (NBA) is as under:

Undergraduate Programmes

	Year Started	Courses Available	Eligible for accreditation 2016-17	Accredited	Status as in January, 2017
1	1987	Mechanical Engg.	Yes	Yes	Accredited upto 30-06-2019
2	1987	Electronics and Comm.Engg	Yes	Yes	Accredited upto 30-06-2019
3	1989	Electrical Engg.	Yes	Yes	Accredited upto 30-06-2019
4	1989	Comp.Sc and Engg.	Yes	No	Surrendered due to low SFR.
5	1990	Chemical Engg.	Yes	No	Surrendered due to low SFR and Cadre deficiency
6	1991	Architecture	Yes	No	Applied but not

					considered by NBA
7	2004	Bio-Technology	Yes	No	Not considered by NBA for poor admissions
8	2004	Bio-Medical Engg.	Yes	No	Not considered by NBA for poor admissions
9	2009	Civil Engineering	Yes	No	Applied

Post Graduate Programmes

			Eligible for accreditation 2016-17	Accredited	Status as in January, 2017
10	2003	Electrical Engineering (I&C)	Yes	No	Surrendered as there are no admissions for consecutive two years
11	2003	M.Tech Mechanical Engineering	Yes	Yes	Accredited for two years upto 30-06-2018
12	2003	MBA	Yes	Yes	Accredited for two years upto 30-06-2018
13	2006	Electronics and Communication Engineering	Yes	Yes	Accredited for two years upto 30-06-2018
14	2009	Electrical Engineering (Power Systems)	Yes	No	Applied. Expert Team Visit pending
15	2009	Computer Science and Engineering	Yes	Yes	Accredited for two years upto 30-06-2018
16	2009	Chemical Engineering	Yes	No	Applied
17	2009	Architecture	Yes	No	No option available on the portal.
18	2009	Energy and Environmental Studies	Yes	No	Applied
23	2010	Materials Science and Nano-technology.	Yes	No	Applied
24	2010	Bio-Technology	Yes	No	Applied
25	2010	Bio-Medical Engineering	Yes	No	Applied
27	2012	Hospital Administration	Yes	No	Not approved by AICTE
28	2012	Urban and Rural Planning	Yes	No	Not approved by AICTE
29	2014	Construction and Real Estate Management	No	No	Not eligible
30	2014	VLSI	No	No	Not eligible
31	2014	M.Tech. in Food Technology	No	No	Not eligible
32	2014	PG Diploma in Forensic Biotechnology	No	No	Not eligible

33	2014	M.Tech. (Highway Safety and Engineering)	No	No	Not eligible
34	2015	M.Tech. Renewable Energy	No	No	Not eligible

INTEGRATED PROGRAMMES					
36	2012	MBA	Not eligible		
37	2012	Mathematics	Not eligible		

EXTRA & CO-CURRICULAR ACTIVITIES

University is aware of the need to ensure overall development of personality of the students so that they can face the world through demands for self-confidence and leadership qualities. It is with this object in view that students organize programmes, with guidance from the faculty members, calling for showcasing their skills not only in the technical fields but also in cultural events comprising performing arts. Such programmes termed TECHNOVA and RHYTHM respectively provide for a common platform and excellence in the fields are awarded. Students are also encouraged to participate in similar programmes organized by other universities/institutes. The programmes that are taken up include:

Sports & Games

Sports events are organized at the University level as well as at regional level, through the aegis of organizations like Association of Indian Universities. Infrastructural facilities available are as detailed below:

Name	Nature	Nos.
Tennis Academy	Synthetic with flood lit	1
	Clay with flood lit	2
	Cemented courts with wall practice with flood lit	1
Basketball court	Cemented standard size with flood lit	2+(One under construction)
Athletic Track with stage	Standard size with permanent brisk border	1
Volleyball court	Playing field arena and Hostels	5
Gym in Health center	10 stations multi gym + 6 single stations gym with Dumble and Swiss ball in health centre	1
Gym in Kalpna Chawla Hostel	2 Semi commercial trade mills+ 1 Cross trainer+ Seating Cycle + Abscurl stations and leg extensions	1
Kabaddi		1
Football	Standard size (improvised existing small size)	1
Swasthya Path/Jogging Tale	Open	1
Handball		1
Netball		1

Korfball		1
Table Tennis	Hostels	6
Badminton	Multipurpose Indoor Hall is under construction	4
Hockey	Grassy	1

Developments in hand:
Swimming Pool
Gymnasium

Technical Events

To inculcate in students the potential to excel in technological development by infusing in them the spirit of competition, these events are organised where students from other universities/ colleges participate to show their innovative designs, new ideas through project and paper presentations. Different gadgets exhibited during such festivals in different categories provide them the opportunity to further refine their developments infusing in them the spirit of competition. Students participate not only in the events that are organized at the University level but also are encouraged to participate in similar events organized by other institutions/ universities.

Cultural Events

Cultural events like stage plays, musical programmes etc. are organized with extensive participation from other universities/ institutes. Students not only participate in the events organized at the University level but are encouraged to participate in similar events organized at other institutes/ universities.

Study Tours

As part of the curricular activities tours to places of technical and historical interest are organised to ensure students to understand the ground realities of their job assignments that follow after their life in campus.

Institutional Social Responsibility

It is difficult to conceive of an organization that insulates itself from the society as to its needs and aspirations. University is not only aware of the surrounding areas but owes its very existence to the society for it was the local community that donated land, 273 acres, over which the former College was established, in 1987, that was upgraded to the University in 2006. University is committed to work for the society through measures detailed below:

1. Counseling students in the schools and college in Murthal. Students and teachers from the University counsel the students for their prospects after they leave the school/ college.

2. Students from Murthal village are allotted seats for preferential admissions based on the admission tests conducted by CBSE. Seats allotted to the wards of the villagers are both at UG and PG levels and include B.Tech-10, LEET-2, MBA-2 and M.Tech.-2.
3. Students are encouraged to be involved in community service. Through an NGO established by them (SAVERA) they teach children of the contractors' employees engaged within the University or in nearby areas, to a level and helping them to register for open/ regular schooling. Such children are sometimes provided mid-day meals by the students who also help to bring them into the social mainstream by involving them in cultural events organized by the University.
4. Deenbandhu Chhotu Ram Chair for Sustainable Development has been established with the objective of carrying out research on the life and works of the Deenbandhu. The department is involved in connected activities of sustainable development. The Chair addresses local issues including one of high accident potential of the National Highway closeby. Activists are being trained for rendering first-aid services in case of accidents and be the group in service in the event of disasters striking on roads or elsewhere.

SWOC ANALYSIS

Strengths

As indicated earlier the University is endowed with strengths that accrued to it by virtue of its long existence, strong infrastructure, all out efforts to strengthen faculty and inroads made into research and consultancy services being provided by the faculty. Advantages of the University, as outlined, not only cover the curricular aspects but other allied areas in engineering, applied sciences, management, architecture and humanities. This helps the students to develop themselves in other areas also putting them in advantageous position, when compared to students from within the State as well with the universities/ institutions outside the State. Feedbacks obtained from different stakeholders have revealed that one of the drawbacks observed is lack of good communication skills. This is attributable to students from geographically or socially backward areas. Such deficiency in students is addressed through special programmes conducted for such students by the Department of Humanities of the University. Special classes are taken up for such students. A language lab has been established to enable them to make up their deficiencies. Besides, special programmes for students, from the rural background and those belonging to the weaker sections of society, are coached not only in improvements in the current study areas but for enabling them to appear for competitive examinations for civil services conducted at State or Central Government levels. Such Remedial Coaching is available through a programme under the aegis of the University Grants Commission. For financially weaker sections, besides fee concessions, tuition waiver schemes and scholarships are available. Some students are provided assistance through earn-while-learn scheme.

University laid along the National Highway provides for easy access through road transport system. It was one of the reasons, and considering demand of the working professionals, that Part-Time programmes through weekend classes had been introduced.

These were, however, stopped because AICTE did not agree to the courses on the plea that these did not fit in their format.

Locational Advantage

University laid along the National Highway provides for easy access through road transport system. It was one of the reasons, and considering demand of the working professionals, that Part-Time programmes through weekend classes had been introduced.

Multiple Subject Coverage

Wide coverage of the subjects enables vast coverage of allied areas for expansion programmes or those with multi-disciplinary base. University has set up Center of Excellence for Energy and Environmental Studies, Sir Chhotu Ram Chair, etc.

Workshop

University has a very strong workshop that is equipped with the latest equipment for imparting on-the-job training for the students.

Alumni

Besides being a direct link between the University and the employer they provide needed feedback for the University to not only provide for a better output but also take decisions in administrative matters. Alumni of the University meet once an year and provide for open forum for discussions as well as organize interactive sessions through seminars/workshops etc. which are organized at their initiative.

WEAKNESSES

As indicated the University was established on upgradation of erstwhile Chhotu Ram State College of Engineering, which started functioning from 1987. While infrastructure is being added support on the front of establishment/ upgradation of laboratories etc. is needed so that research can pick up even at undergraduate level making the gamut of teaching learning to be made more interesting and productive. The areas that need particular attention are:

Strengthening Laboratories

Technological developments can make some laboratories redundant which need to be spruced up to make the totality of the teaching-learning more appropriate in terms of such developments. This, further, helps students develop interest in research right from the stage of undergraduate studies based on their internship training.

Internship Training

By far the training programme in the present shape does not help either the students or the industry in so far as the pattern is not commensurate with the curricular content. Without theoretical coverage of the subject of their training students rarely can contribute either to the industry or to practicalisation of their theoretical knowledge. A more pro-active and thoroughly involved faculty-student involvement in the industrial problem definition and solution can be the only solution.

Workshop Practices

The present system of workshop practice needs to be made more stringent in coverage and application. The objective is to give a comprehensive exposure of the students to the multi-disciplinary needs in application of their technical knowledge to needs under field situations.

Academic calendar

Where the admissions are through State Counseling Society (at UG level) the process is delayed affecting the teaching days in the first semester for UG courses.

Intellectual Property

University research and development work is still not helping in generating intellectual property and till date the University does not have any patents in the name of any faculty.

Financial strength

University still depends on State Government for faculty salary and fund for developmental works. University is not generating sufficient revenue through consultancy work to fund such developmental activities. University does not have any endowments that can generate some surpluses.

OPPORTUNITIES

Location of the University in NCR and rapid industrialization:

University can explore the possibility of collaboration with industries/ firms for industry-academic partnership.

Capitalizing the lab infrastructure in revenue generation by extending the facility to industries/ firms

With extensive facilities available in laboratories, workshops, specialized laboratories etc. University can offer such services to industry.

Courses for working professionals:

Due to locational advantage within NCR, University has ample scope for starting part-time programmes not only in the basic subjects but also in allied areas for working professionals who can commute from their places of work to the University.

Courses on part-time basis had been started, through weekend classes, which attracted working professionals from wide geographical area but these had to be stopped since All India Council for Technical Education (AICTE) did not approve these programmes despite their advantage of contact hours etc.

CHALLENGES:

Mushrooming of professional colleges in the locality, some of which are sponsored by corporate houses, make for functioning of these purely on business lines that can put the University to some disadvantage obviously because of a different philosophy of governance. As indicated while the institutions have cost-benefit analysis as the criteria, University has to address responsibilities to the society and the nation as a whole. The problems that arise include:

Faculty retention

Entry of private players in the education sector is likely to cause shift of focus as indicated above. Such players have their own criteria of balancing work with pay that can cause adverse impact on the faculty positions that are covered by the pay scales of the State or the Central government. Any offers that exceed the scales can cause shift of the faculty positions which are already scarce and nowhere close to requirements in accordance with the norms.

Corporates in Education

As indicated the entry of corporate sector in the education system makes for change in the total identity of the stakeholders and the criteria becomes more like that of a business enterprise rather than anything of a social responsibility. Change in focus puts a higher responsibility onto the universities/ colleges funded by the State or Centre as change agents for attainment of the objectives set by the State policy.

Utilization of the infrastructure

To compete with the corporate sector the State funded institutions have to find out ways and means of increasing utilization of the infrastructure to ensure that the stakeholders do not complain of costs being added onto them. Part-time programmes started with this object in view had been struck down by AICTE.

Multi-disciplinary courses

This is the buzzword today. Coverage of the subjects at the basic level provides for an opportunity to expand these programmes based upon market survey. Starting these

programmes, as part-time programmes, will be an option that will find favor with the working professionals.

Shortage of faculty

In many specialized fields, it is very difficult to get good quality faculty due to non-availability of Ph.D. degree holders in the relevant area/ field. Further, there is an inherent tendency in those leaving campus to prefer industry as the first choice with higher education low in their priority.

BEST PRACTICES:

Some of the areas that have yielded beneficial results are indicated below:

1. Part-time programmes for working professionals
2. Central Instrumentation Laboratory
3. Centre for Research Innovation and Development (CRID)
4. University Test House (UTH)
5. Regional Test Centre for equipment used for tapping non-conventional sources of energy